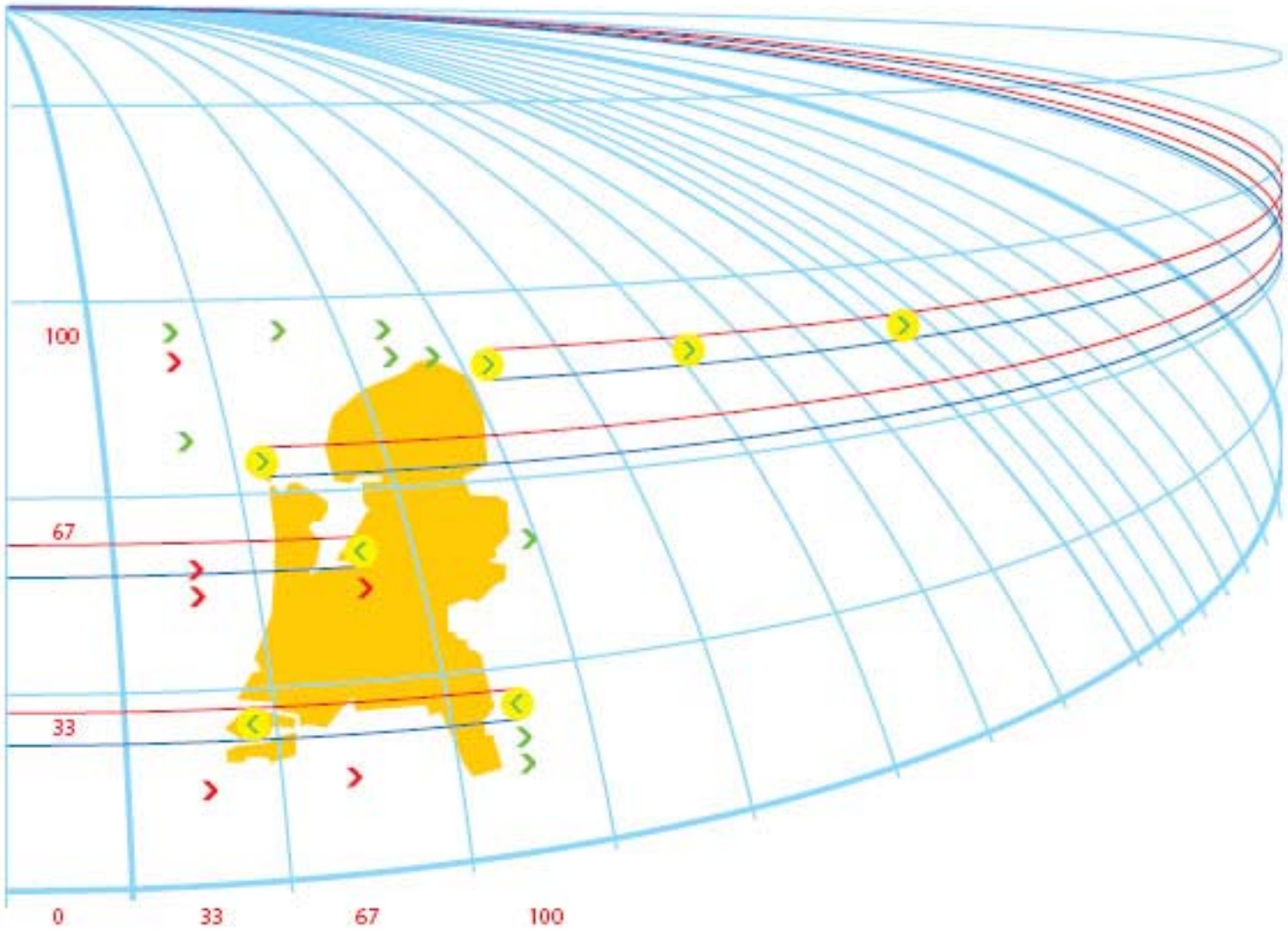
Offshore Readiness Assessment II

Master's Thesis

University of Twente
Enschede - The Netherlands

YELLOWTAIL
fresh ideas | proven results

Jeroen de Groot



Offshore Readiness Assessment II

Master's Thesis

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"Experience is the mistress of fools”

Management Summary

Yellowtail is a small Dutch company which provides IT project management, business consultancy, and architecture services to her clients in the financial world and to governmental institutions. Yellowtail was founded in 2003 and employs about 25 people in The Netherlands. It has a software development centre in Cape Town, South Africa.
Yellowtail conducted her first Offshore Readiness Assessment (ORA1) at Dutch financial service providers in the end of 2004. Yellowtail investigated the degree to which those service providers were able to move their IT operations offshore during that assessment. It appeared that some organizations already gained offshore experience with varying success. Besides it was expected that the influence of offshoring on the Dutch economy would be clear within two years.
This research is called Offshore Readiness Assessment 2 (ORA2), which is a follow-up study based on ORA1. It assesses the degree to which Dutch financial service providers are prepared for offshoring two years later. Before the research, it was expected that Dutch financial service providers would be better prepared for offshoring than during ORA1. Compared to ORA1, theoretical underpinnings are enriched along with the conduct of three case studies so that more insight into offshoring is acquired.

Approach
Literature concerning offshoring was studied before the actual assessment and case studies have been conducted. The assessment and case studies were founded upon the results of this literature study. A theoretical model is composed first which prescribes how to execute an offshoring project. Five success factors (four from ORA1 and one from the literature study) directed at the actual execution of an offshore project were identified subsequently:

- Method
- Culture
- IT activities
- IT governance
- Knowledge sharing

A questionnaire was composed in the next step according to these success factors which predominantly consisted of closed questions. Each question investigated either the readiness or mindset of a particular area within a success factor. The results are presented in a matrix which uses readiness and mindset as its dimensions. Each success factor has its own matrix and one overall matrix is composed which is the average over the five success factors.

Main findings
ORA2 is executed in a similar manner as ORA1, therefore it is possible to compare the results. Personal interviews were chosen as technique to collect the data, twelve people from different financial institutions answered the closed questions. The increase in score which was expected based on the experience from two years ago was not found, so there was no reason to believe that this increase did actually took place. Figure 1 shows the results from ORA2 on the right while the results from ORA1 are shown left. The blue dots represent individual companies which participated while the red dot is the average score.

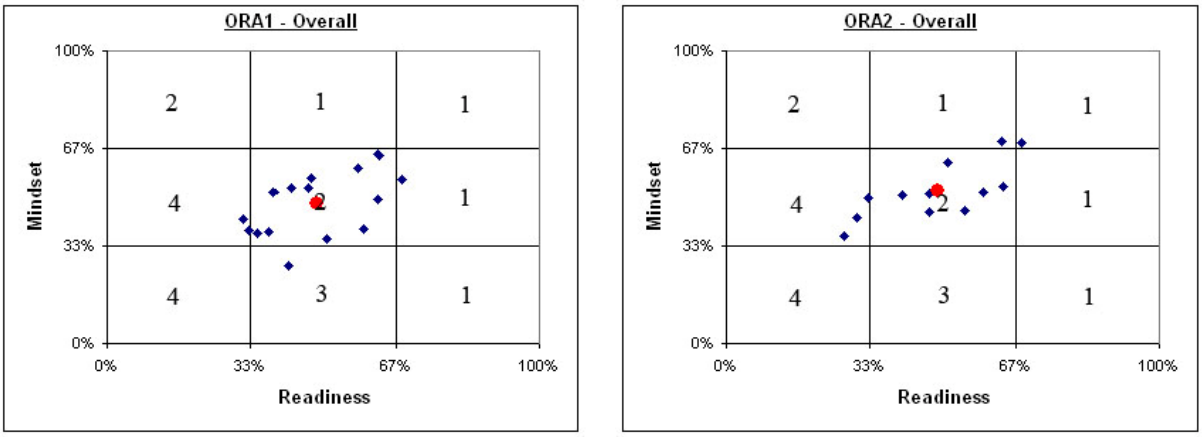

Figure 1: Results ORA1 (2004) and ORA2 (2006)

As can be seen the increase in score is rather modest. The average readiness and mindset score at ORA1 both equalled 48 percent, in ORA2 these figures were 49 percent and 52 percent respectively. The matrix is divided in nine areas which all got a number between one and four. Each number corresponds to an advice regarding offshoring. One is the highest scores and organizations which are situated in this area are prepared to offshore their IT work. Organizations which stay in the second area have the potential to offshore successful. Companies in the other areas are advised against engaging in offshoring. Most of the organizations have the potential to be successful in offshoring IT work, as can be seen in figure 1. The borders which separate the advices and the advices itself may be changed later on if it appears that they do not hold in practice. This is currently impossible because too little offshoring experience is gained by Dutch financial institutions.

Case study findings

Three offshore projects were investigated by means of a case study. It appeared that working with people from a different culture is still underestimated by some Dutch financial institutions. They did not bother to make employees aware of the difference in culture, in spite of all the attention which this topic received lately. Problems related to these differences emerged quickly.

Similar problems were encountered which did relate to business knowledge. The Dutch financial service providers assumed more business knowledge at their offshore suppliers and thought that this knowledge was easily transferable. Also problems emerged at those aspects, sometimes they even made the projects unsuccessful.

Further improvements to research

During the research it was also found that improvement could be made to the theoretical model. Two improvements which could be made are removing the readiness mindset matrix (thus making the score a single value) and changing the scoring system. Drawback of implementing these changes is that comparability to ORA1 is lost. The main findings would be about the same when this improved method is used to calculate the results of ORA2.

Preface

Doing a traineeship at a middle-sized Indian offshore software supplier triggered my interest for this business and this assignment is a fine continuation. Therefore I would like to take this opportunity to thank Yellowtail for giving me the chance to carry out this assignment. I am especially grateful to Jeroen Oortwijn and Robert Harreman for providing me with the knowledge to succeed in writing this thesis and joining me at a lot of interviews, especially given their scarce time. Furthermore I would like to thank all the other employees for giving me advice and having a good time together.

The other party involved in this research has been the University of Twente. I would like to thank my supervisors Jos van Hillegersberg and Mehmet Aydin for the time and effort they put in this research. Their effort undoubtedly contributed to the quality of this thesis.

Last but not least I would like to thank my parents, for always supporting me, my sister and my friends. Without the latter I would probably have graduated earlier but life would have been a lot less enjoyable.

Hilversum, September 2006

Jeroen de Groot

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Chapter One: Introduction

This first chapter states and explains the matters which are important to this research, the five objectives upon which this research is founded, the problem statement, and the research questions.

1. Introduction

1.1. Background

Yellowtail B.V. (Yellowtail) is a small Dutch company which provides IT project management, business consultancy, and architecture services to her clients in the financial world and to governmental institutions
Yellowtail conducted her first Offshore Readiness Assessment (ORA1) two years ago which investigated the degree to which Dutch financial service providers were prepared for offshoring (see figure 2 for definition) their IT work. The Offshore Readiness Assessment 2 (ORA2) will carry on this research and is executed by means of a graduation project from the University of Twente under the supervision of Yellowtail. The previous assessment was carried out completely by consultants of Yellowtail.
ORA1 resulted in some interesting leads which will be investigated during this research. Two years ago hardly any organizations had experience with offshore projects although it started to attract some attention. A lot of companies indicated they were planning to conduct offshore projects within two years.
Yellowtail knows from her own experience with her clients that offshore projects are carried out by some of them and draws the attention of all of them. Therefore Yellowtail expected prior to ORA2 that those organizations were better prepared for offshoring their IT work. Among other reasons ORA2 was carried out to check this expectation.

1.1.1. Offshoring

Introduction
Offshoring and outsourcing are starting to get heavily used in the contemporary business world. Offshoring and outsourcing are often used intertwined. Therefore this report will start by providing some nomenclature in order to get this straight.

Offshoring: the practice of moving business processes or services to another country, esp. overseas, to reduce costs (Dictionary.com, 2006)
Outsourcing: The procuring of services or products, such as the parts used in manufacturing a motor vehicle, from an outside supplier or manufacturer in order to cut costs. (Dictionary.com, 2006)

Figure 2: Definitions offshoring & outsourcing

According to the definitions in figure 2, offshoring and outsourcing are only done to cut cost. This research will also consider other reasons including, for instance, shorter time to market or better quality. Offshoring and outsourcing are different and can be combined according to the definitions. Each possible combination of the two is explained below:
Onshore insource: This refers to the classical way of doing business i.e. operations which are performed by the company itself in its home country.
Offshore insource: This mode is chosen by an organization that sets up its own affiliate in another country, especially overseas.
Onshore outsource: Let another entity conduct the operations in the same country.
Offshore outsource: Perform operations in another country by an external entity.

Offshoring and outsourcing are sometimes used intertwined for a good reason. A lot of times they come with the same implications to the company, like loss of control or cost savings. This report will only clearly distinguish between offshoring and outsourcing when this is necessary with respect to the context in which they are used.

History

Offshoring is not a recent management fad, although a lot of organizations recklessly (Swanson, 2004) jump onto an offshoring project. Offshoring is done already for about two centuries. The relocation of the textile industry from England to the USA was probably the first offshoring practice. This took place in 1821 (King, 2005). A lot of major offshore trends have taken place ever since, for example the relocation of the textile industry from USA to China or the production of cars and computer hardware to Asia.

Offshoring is founded on theories which were developed before any significant offshoring practice actually occurred. In "The wealth of nations" Adam Smith (1776) stated the basic idea pretty clearly:

It is the maxim of every prudent master of a family, never to attempt to make at home what it will cost him more to make than to buy... If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage.

David Ricardo (1817) further elaborated in his "On the principles of political economy and taxation" where he promulgated the theory of comparative advantage. This theory says that every person, organization or country should use their comparative advantage and thereby gain from trade. An entity has a competitive advantage if it is relatively good at something. The total output will be the most if everybody does what he is relatively good at.

An example is given to illustrate the theorem further: Two men are alone on an isolated island. To survive they must undertake a few basic economic activities like water carrying, fishing, cooking, shelter construction and maintenance. The first man is young, strong, and educated and is faster, better, more productive at everything. He has an absolute advantage in all activities. The second man is old, weak, and uneducated. He has an absolute disadvantage in all economic activities. In some activities the difference between the two is great; in others it is small. According to comparative: the young man must spend more time on the tasks in which he is much better and the old man must concentrate on the tasks in which he is only a little worse. Such an arrangement will increase total production and/or reduce total labour. It will make both of them richer.

A similar story may apply to offshoring IT activities. Indian companies currently conduct a lot of IT work offshore for their western clients. Maybe western employees are faster in almost all economic activities, while Indians are only a little worse when IT activities are involved and that is why they perform those particular activities.

This theory relies on some implicit assumptions, such as there is no cost of transportation, free trade is possible and competition is absolutely perfect. The 'real' world does not exactly comply with these assumptions so in practice this theory is less visible as it would be in theory. The famous economist and noble prize winner Paul Samuelson (1969) responded to the theory:

"That it is logically true need not be argued before a mathematician; that it is not trivial is attested by the thousands of important and intelligent men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them."

IT Offshoring

This report will be limited to offshoring of IT work, except for this general introduction on offshoring given above. Therefore this section will introduce this booming phenomenon. At the moment a lot of companies are starting to offshore some parts of their IT work (het Financiële Dagblad, 2006). There are quite a lot of big companies that can carry out big IT

projects or other IT work (e.g. Business Process Outsourcing (BPO) or Information Technology Enabled Services (ITES, services which have some IT component e.g. transaction processing). Figure 3 (Iyengar, 2006) shows the big players at this market, while the figure 4 shows an Indian development centre under construction.

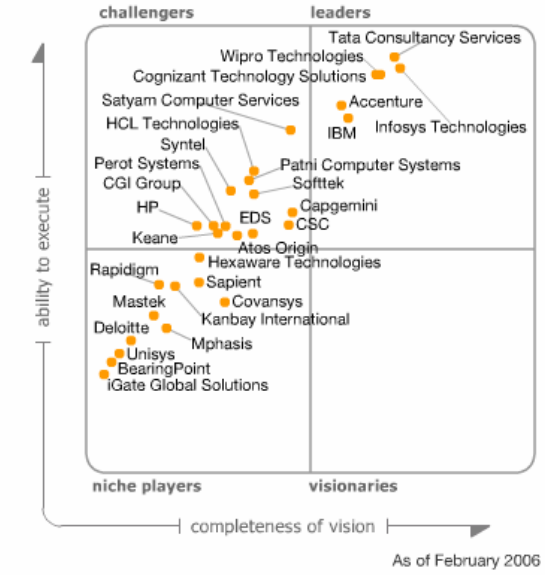


Figure 3: Major offshore service providers (Iyengar, 2006)

Figure 4: Building an offshore development centre in India

As can be seen, big Indian companies like Tata Consultancy Services (TCS), Infosys Technologies and Wipro Technologies are leading the pack. TCS had over two billion USD of revenue in 2005 (Tata Consultancy Services, 2006).
The reasons of offshoring IT can be numerous. Arguably the number one reason is labour cost, as can be derived from its definition presented in figure 2. Software engineers in Asian or Eastern European countries work for a fraction of the wage in USA or Western Europe. Other reasons include better quality or shorter time to market (Object Management Group, 2004), since there are a lot of well educated software engineers in low-income countries while they are hard to find in Western Europe or USA.

Offshoring IT regions
Almost all the IT offshoring work is conducted in just a few regions. This paragraph will discuss the major strengths and weakness of the three most important regions with respect to this report.
Figure 5 shows the scores on all the cultural dimensions Hofstede (2003) identified. The dimensions will not be discussed in detail here but are just to provide a quick quantitative assessment of the cultural differences. The culture of two countries will be more similar if their scores are closer together. Cultural differences will be a nuisance at best (Hofstede, 2003), therefore offshoring will suffer from differences in culture. More troubles will in general be encountered when the cultural differences are bigger.

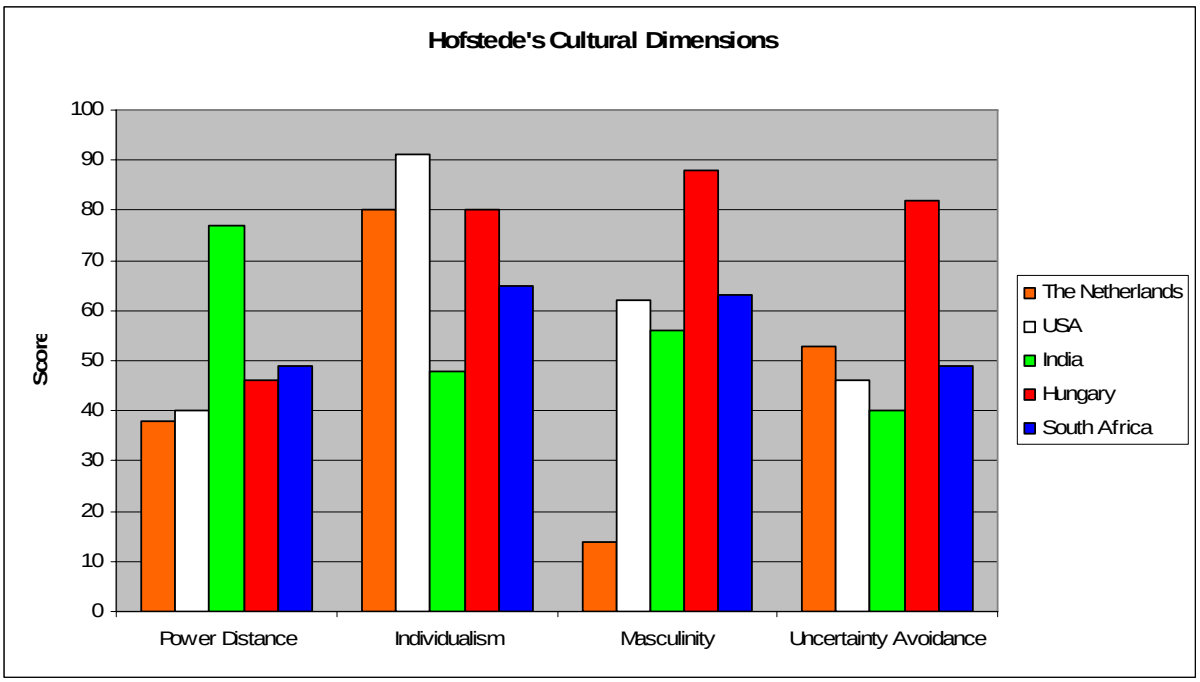


Figure 5: Hofstede's cultural dimensions (2003)

India

India is the super power when it comes to IT offshoring. There are qualified software designers in abundance who master English. The salaries are relatively low although they are rising sharply (Yamamoto, 2006). Although the offshore business grew very rapidly during the last years it has troubles to keep up with the pace (Nasscom, 2006). Some even expect that India will completely lose its popularity (Rijsenbrij, 2006).

The time difference compared to Europe is about four hours and eleven hours compared to the USA, the exact difference depends upon the place and daylight saving time. The differences in culture are significant, as can be seen in the diagram. This is an important factor that companies must bear in mind. A lot of offshore projects conducted in India fail because of these cultural differences (Molenaar, 2005).

Eastern Europe

Eastern Europe is a popular offshore area, especially for companies located in Western Europe, this is called nearshoring because the distance between the locations is small. Eastern Europe also has a lot of well educated software engineers but is in general more expensive than India (1to1media, 2006).

On the other hand, the cultural differences are smaller as can be seen in the diagram where Hungary is representing Eastern Europe. Other advantages are a maximum time difference of just a single hour and it takes only two hours by plane to get there. This makes it possible to visit the offshore location in one day.

South Africa

South Africa will be discussed because Yellowtail has its development centre in Cape Town. At the moment South Africa is not a very popular offshore destination although it offers some interesting advantages (Economist, 2005), especially to Dutch companies. The cultural differences between The Netherlands and South Africa are relatively low. The absolute difference in percentage points at Hofstede's dimensions between The Netherlands and South Africa is smaller than between The Netherlands and India or Hungary. The maximum time difference is one hour depending on daylight saving time. Besides most of the developers

understand Dutch so it is easy to communicate. This is especially an advantage when applications are in the Dutch language. In that case there is no way for the offshore supplier to refrain from using Dutch. Fewer mistakes will be made because the offshore side is acquainted with the language.
There are drawbacks as well, there are a lot less software engineers in South Africa compared to Eastern Europe or India so it does not have a software industry as those latter countries are renowned for. Furthermore it is not easy to visit South Africa, it takes about twelve hours by plane. This makes it harder to start or run a development centre over there.
In general people would prefer visiting a beautiful country over visiting a less beautiful one. From that point of view it is better to start development centres in places were people feel comfortable because onshore employees will go there easier (Carmel, 2005). South Africa is famous for being a nice country (Lonely Planet, 2006), which will assist in attracting western companies and people.

Future
Experts in the field of offshoring differ largely in opinion when it comes to the future of offshoring. Probably offshoring received the most attention during the presidential elections in the USA in 2004, when it was the hardest debated economical issue. Harvard professor Gregory Mankiw (2005), at that time serving as the chairman of President Bush's council of economic advisers, suggested that offshoring was no different from any other type of international trades and thus beneficial to the USA.
On the opposite side stands Alan Blinder (2005) from Princeton University and adviser of John Kerry during the American presidential elections in 2004. He thinks a lot more is at stake and offshoring can be the third industrial revolution, which will dramatically influence society. The main question which differentiates these views is how many jobs are in jeopardy and will eventually be offshored. The future influence of offshoring does largely depend on the answer to this question and will be really hard to predict, probably only future can tell.

1.1.2. Yellowtail B.V.

Yellowtail B.V. (further called Yellowtail) was founded in 2003 to provide IT project management, business consultancy and architecture services to her clients in the financial world and to government institutions. Yellowtail operates on the interface between business and IT.
Yellowtail is growing since her foundation. At the moment Yellowtail employs about 25 business consultants, project managers or software architects. They are planning to increase workforce in a controlled manner to about 50 people. Most of the consultants have some years of experience in the field. Yellowtail is deliberately staying small in order to be able to provide a consultancy culture characterized by creativity, professionalism, entrepreneurship, and sharing of knowledge. These values will be easier to achieve as a small company according to themselves.
The organizational structure of Yellowtail is given in figure 6. Three main parts can be identified, the IT offshoring/software development department, the consultancy department and *Fizier*.

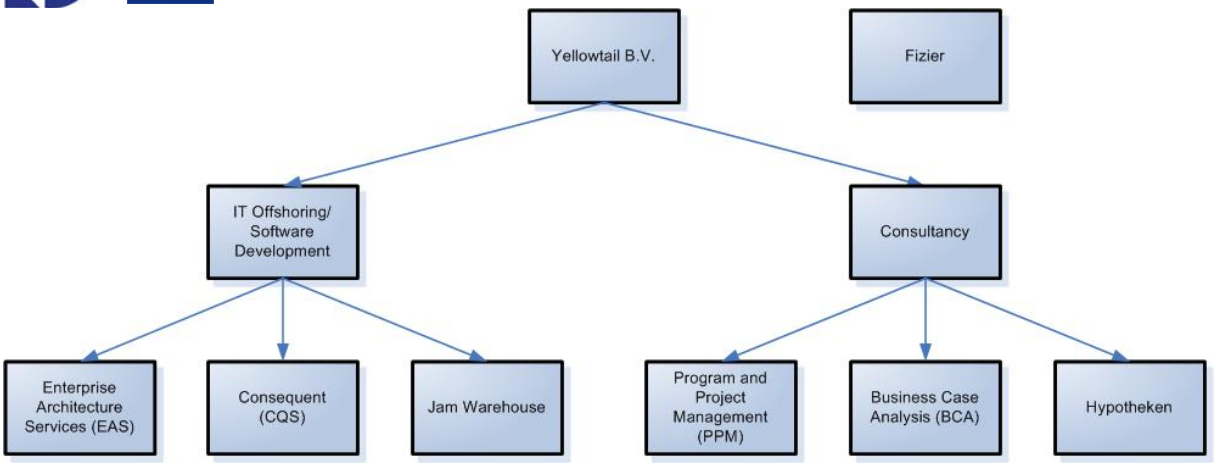


Figure 6: Organizational chart Yellowtail

The solutions provided by Yellowtail's consultancy department often require the development of software. The IT offshoring/software development department delivers these solutions. The programming and testing parts of these projects are not carried out in The Netherlands but at development centres in Cape Town, South Africa. Consequent is the company which is founded by Yellowtail in order to do all this work. Currently Consequent is doing almost all of the offshore work. The remaining work will be transferred to them in the near future at the expense of Jam Warehouse, which conducted most of the work previously.
Enterprise Architecture Services (EAS) is the department of Yellowtail that developed the approach used for offshoring in South Africa. This method is called "Rational Unified Process (RUP) for Offshore" (Yellowtail, 2006) and is based on the popular iterative software development method Rational Unified Process (2006). This method aims to communicate, with as few deliverables as possible, as clearly as possible during system development projects. This is especially important in offshoring, since time, language, and cultural differences further complicate cooperation. Besides this method EAS develops all other kinds of products and services which are necessary in order to keep the offshore centres running.
Currently, Yellowtail has one main product which is called *Fizier*, this is a program that delivers financial advice. Formally, *Fizier* is not a product of Yellowtail since it is a separate legal entity as can be seen in the organizational chart. Their consultancy department can conduct all kinds of projects for clients in the financial or governmental sector.

1.1.3. Background: Offshore Readiness Assessment 1

Yellowtail carried out an *Offshore Readiness Assessment* (Yellowtail, 2004) two years ago. The aim of this research was to measure the degree to which the Dutch financial institutions were ready and had their mind set towards offshoring IT work. 16 People from 11 Dutch financial institutions (four banks, four insurance companies and three pension funds) were interviewed. Most of the interviewees were a member of the IT board or chief information management.
The research used four success factors which were supposed to predict whether offshoring IT would be successful or not. Those four factors are given below and were gained solely by Yellowtail's offshoring experience at that time:

1. Method
2. Culture
3. IT activities
4. IT governance

A questionnaire was used that consists of about 20 closed questions for each success factor, in total the questionnaire (Appendix A) contained 83 closed questions and eight open questions.

About half of the questions dealt with the readiness, the others with mindset. All the possible answers, four at each question, were awarded points in advance. As a result the score on each success factor, separated by readiness and mindset, could be calculated after the interviews. Readiness and mindset play a very important role in this research, therefore a clear definition of both of them is given in figure 7 (the Oxford English Dictionary, 1989):

Readiness: The quality, state or condition of being ready Mindset: Habits of mind formed by previous events, or earlier environment which affect a person's attitude

Figure 7: Definitions Readiness & Mindset

During ORA1 (and in this research as well) readiness comprised the companies' state of being ready for offshoring while mindset is their attitude towards offshoring. Readiness usually refers to factual and tangible things (for example whether an organization has a system development method) while mindset usually refers to perceptive and intangible things (for example whether employees in an organization judge a system development method as necessary).
The score is measured as the percentage of the highest possible score to attain. A matrix was made for each success factor with the readiness on the X-axis and the mindset on the Y-axis (Appendix C). This model was implicitly founded upon the theoretical model which is in figure 8:

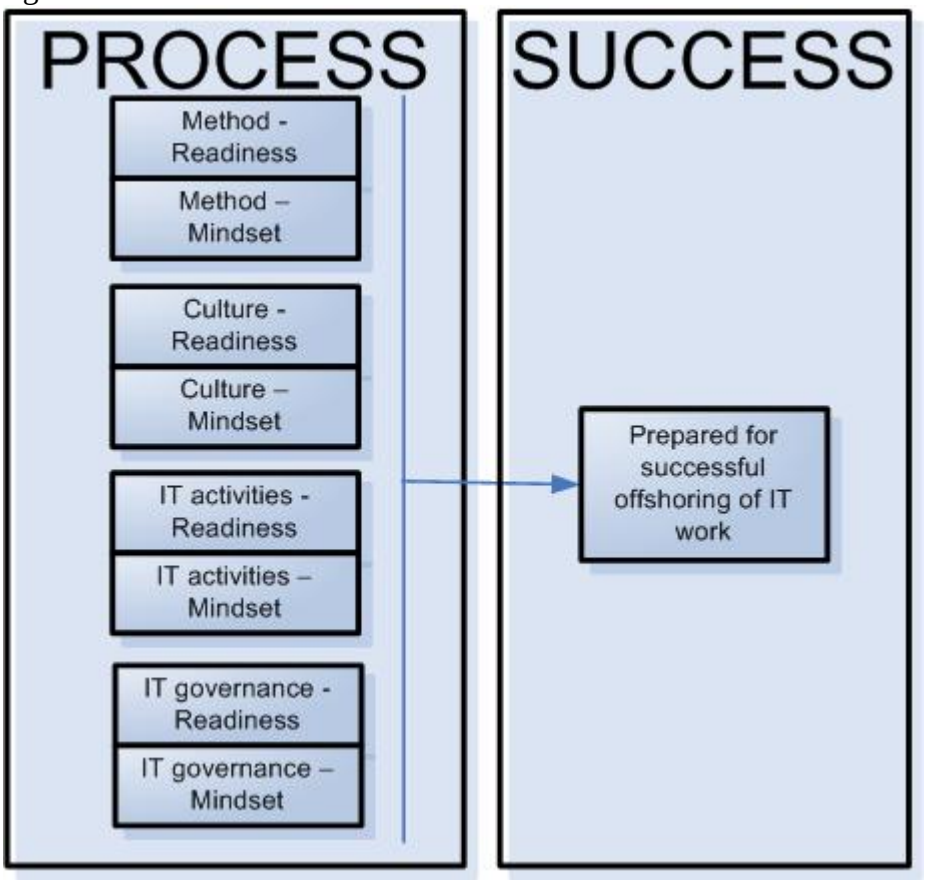


Figure 8: Theoretical model ORA1

The theoretical model clearly shows that the four success factors are all divided in a readiness and a mindset part. All these eight parts together determine whether IT work will be done successful if it is moved offshore. Table 1 shows the average scores (over all companies) on both dimensions for each success factor.

	Readiness	Mindset
1. Method	62%	51%
2. Culture	39%	42%
3. IT activities	38%	51%
4. IT governance	56%	48%
Overall	48%	48%

Table 1: Results offshore readiness assessment 1

In general organizations score best on the method success factor and worst on culture. The other two factors are in between with IT governance scoring better than IT activities.
An advice regarding offshoring is drafted based on these results. This is the overall advice which is the weighted average over the four success factors. Four different areas in the matrix are identified which are stated below (see Appendix B for explanation at each area):

1. Offshore ready
2. Offshore potential
3. Offshore unlikely
4. Do not offshore

Figure 9 shows the results from ORA1. The numbers in the matrix correspond to the numbers above and give the recommendations. The small dots represent each single company that took part in the survey and the big red dot is the average over all companies.

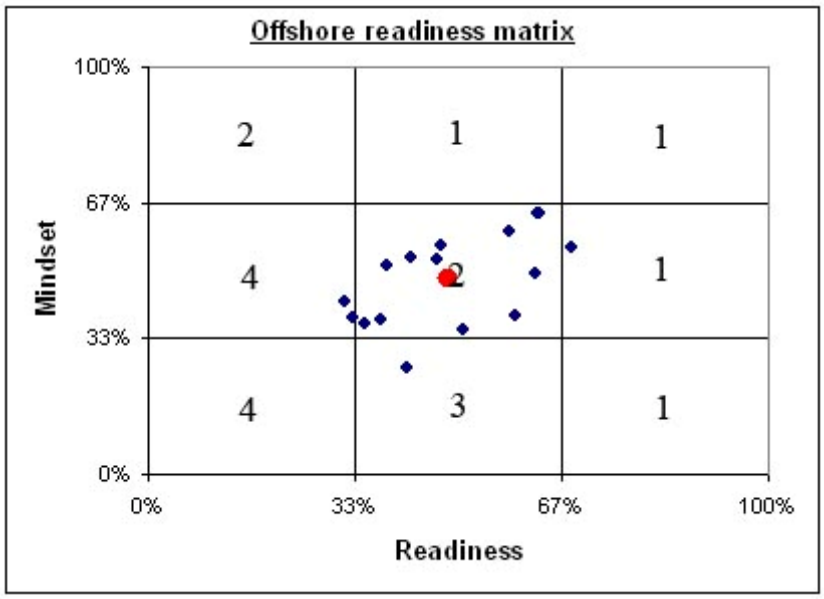


Figure 9: Individual scores Offshore Readiness Assessment 1

Most of the companies that took part in the survey are located in the *Offshore potential* area, one company is even situated in the *Offshore ready* part of the matrix and three companies are placed in an area where offshoring is unlikely or even advised against. According to this research most of the companies were fairly ready to start offshoring and probably they will do in some years.
A final note regarding these areas is appropriate here. The areas and their corresponding recommendations have a predictive character and do definitely not claim to have deterministic power. Some reasons make the results less reliable: the personal characteristics of the interviewee, the fact that it is based on a model which inherently loses some parts of reality and the borders in the matrix (a company which scores 32 percent on readiness and 66 percent at mindset is situated in the *Do not offshore* area while it would be in the *Offshore ready* area if it got two percents more at both dimensions).

At the time of this research it was expected that within two or three years the companies would have conducted some offshoring projects. This was also indicated by themselves during the interviews and is one of the main reasons why this research will be carried on: to find out about the readiness, mindset, and experience regarding offshoring at Dutch financial institutions about two years later.

1.2. Problem formulation

A lot of Yellowtail's clients are Dutch financial service providers and Yellowtail has her own offshore software development centre. Therefore Yellowtail wants to know how well these service providers are prepared for offshoring of their IT work. This will be assessed in order to acquire more insight in Yellowtail's customers. Assessing offshore preparedness also implies that Yellowtail knows how to conduct offshore projects which will assist them in attracting new customers. Clients will be aware of this research because its results will be published, this will also increase brand awareness.

1.3.Objectives

This research is based on five main objectives. The Offshore Readiness Assessment 2 comprises all these five objectives although actual assessing (i.e. measuring the readiness and mindset towards offshoring of Dutch financial institutions in 2006) is only done to cover the second objective. The other objectives relate to this second objective. This is done to clearly address the similarities between ORA1 and ORA2 although ORA2 has more objectives. The five paragraphs below will discuss all objectives separately. They are stated in the same order as they will be discussed in this report.

Improve theoretical model
The model underlying ORA1 was made quickly and solely based upon Yellowtail's own experience. The first part of this research will be directed to the improvement of this model. A literature study will be carried out in order to get a model which is also founded upon theory. These improvements are subject to some clear comparability constraints. The actual offshore readiness and mindset results (second objective) must be comparable to ORA1 (third objective). Therefore improvements cannot be too radical, some basic parts like the readiness mindset matrix must be present in this research as well.

Measure Offshore Readiness and Mindset
The Offshore Readiness Assessment 2 (ORA2) will measure the current state in terms of readiness and mindset towards offshoring IT work at all the organizations that participate in this research. These organizations will all be Dutch financial institutions and will be treated as a representative sample of all the Dutch financial institutions. The result, the average readiness and mindset, will therefore be classified as the average of all Dutch financial institutions. The same holds to the results acquired during ORA1.

Measure change in Offshore Readiness and Mindset between 2004 and 2006
This objective will examine the change in readiness and mindset to offshoring IT work at Dutch financial institutions since ORA1. A lot of attention is paid to offshoring during the last two years, and some experience is gained as well. Furthermore, a lot of companies indicated in ORA1 to be eager to actually carry out some offshore projects within two years. Therefore it will be interesting to see whether the Dutch financial institutions made any progress when it comes to the readiness and mindset towards offshoring and who was engaged in any offshore project.

It is expected that the Dutch financial institutions will be better prepared for IT offshoring than two years ago. This is supposed because of the offshoring projects which have been carried out by some of them and all the attention which is paid to offshoring. Furthermore, it is supposed that the organizations which did not engage thus far watch the others carefully and learn from their mistakes too and get better prepared like this.
The previous objective and this objective ("Measure Offshore Readiness and Mindset" and "Measure change in Offshore Readiness and Mindset" respectively) are the most important objectives of this research. This is the only research directed at the offshore readiness and mindset of Dutch financial institutions while plenty of other authors wrote about offshoring in general or directed at another specific topic. Objectives one conflicts a bit with this objective, as discussed earlier. The more the theoretical model is changed, the less comparability there will be between ORA1 and ORA2. This objective will prevail most of the time because it is focused on discovering longitudinal trends.

Provide recommendations towards successful offshoring
Recommendations for successful offshoring of IT work at Dutch financial institutions will be provided to meet this objective. This may be interesting to the Dutch financial institutions. At the moment some have conducted offshoring projects with varying success. Recommendations can help them offshore more successfully.

Further explore the limitations of the research and provide directions for further improvements
This last objective will ignore the requirement for comparability with ORA1 and provide more radical changes based on the experience gained during the fulfilment of the previous objectives. It will provide suggestions for improvements of the theoretical model, even if this completely breaks comparability.

1.4. Research questions

The following research questions are formulated to make the objectives more operational. They do all relate to one objective, which is given behind each research question between the brackets. Each individual objective will be reached when its corresponding research question is answered.

1. *Which factors contribute to successful offshoring?* (Improve theoretical model)
2. *How well are the Dutch financial institutions prepared for offshoring in terms of readiness and mindset?* (Measure Offshore Readiness and Mindset)
3. *What is the difference in readiness and mindset at Dutch financial institutions regarding offshoring between 2004 and 2006?* (Measure change in Offshore Readiness and Mindset between 2004 and 2006)
4. *Which lessons can be learned from previously conducted offshore projects and the current situation at Dutch financial institutions?* (Provide recommendations towards successful offshoring)
5. *What further improvements can be made to the research with the experiences of ORA2 in mind?* (Further explore the limitations of the research and provide directions for further improvements)

1.5. Research approach

The research approach is an important part in the setup of the research because it shows all the components of the research and the way they interrelate. The graphical representation of the research approach used in this research is given in figure 10.

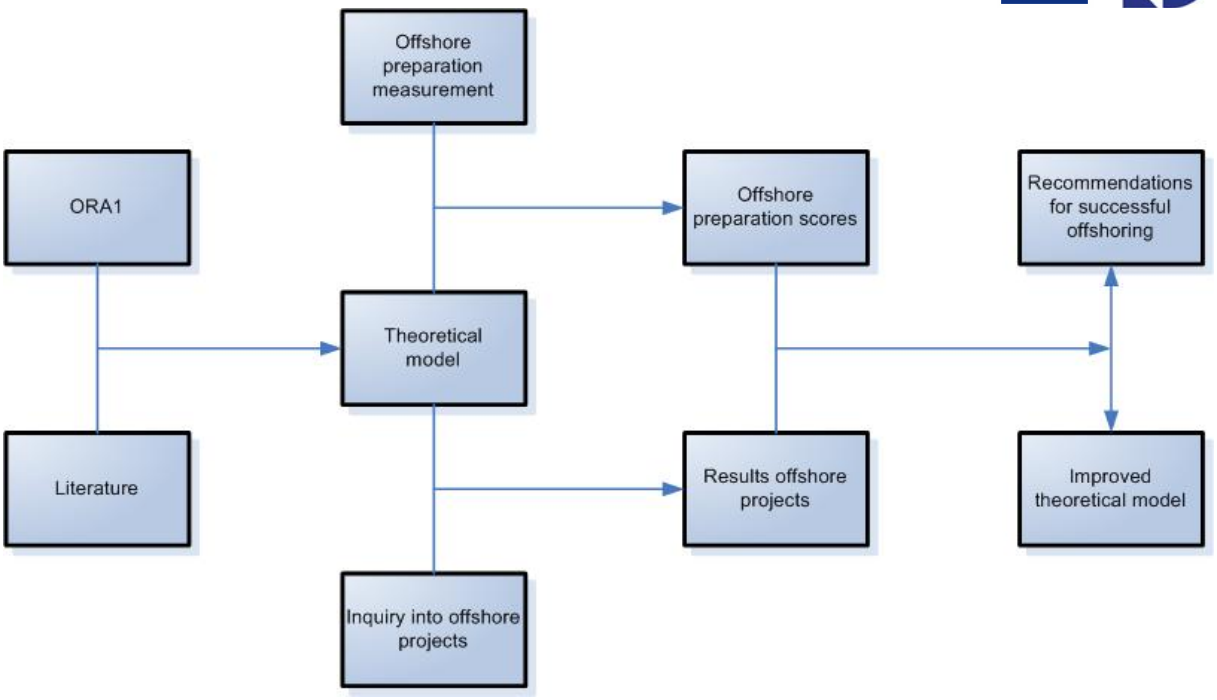


Figure 10: Research approach

A lot of different things can be found in this research approach, like sources, activities, and deliverables. This may seem a bit chaotic but its single aim is just to provide a high level view of the complete research.
Table 2 gives a clear overview how the research questions relate to the blocks in the research approach and which parts of the thesis covers these two:

Research question	**Blocks of research approach**	**Part of thesis**
1. Which factors contribute to successful offshoring?	ORA1, Literature, Theoretical model	Chapter two + three
2. How well are the Dutch financial institutions prepared for offshoring in terms of readiness and mindset?	Offshore preparation measurement, Offshore preparation scores	Chapter four
3. What is the difference in readiness and mindset at Dutch financial institutions regarding offshoring between 2004 and 2006?	Offshore preparation measurement, Offshore preparation scores, ORA1	Chapter four
4. Which lessons can be learned from previously conducted offshore projects and the current situation at Dutch financial institutions?	Offshore preparation scores, Inquiry into offshore projects, Results offshore projects, Recommendations for successful offshoring	Chapter four, five, and six
5. What further improvements can be made to the theoretical model with the experiences of ORA2 in mind?	All blocks	Chapter seven

Table 2: Relation Research Questions, Research Approach, Thesis

The first research question will be answered by a study regarding the theoretical model used in ORA1, which is already described earlier, and a literature study into the contemporary theories about offshoring IT work. This will result in an improved theoretical model which will be the point of view used in the remaining research, and it covers the first objective.
An investigation will assess the readiness and mindset of Dutch financial institutions regarding offshoring, this covers the second research question. The rationale behind this assessment will stem from the theoretical model. This is discussed in the first part of chapter four. The other part of this chapter serves to answer the third research question and compares the results from ORA2 to the two year old results of ORA1 in order to see similarities and differences.
Some inquiries into offshore projects will be made in the fifth chapter to collect hands-on information. This information serves an important role in answering the fourth research question. The results from the assessment will also be taken into account. The recommendations will be derived from these two sources of input and are discussed in chapter six.
The seventh chapter of this report serves to answer the fifth research question. All the previous experiences and material of the research will be used to identify improvements which can be made to the theoretical model which is used.
The eighth and final chapter of this report presents all the conclusions. It clearly describes the answers to all objectives and corresponding research questions.

1.6. Research scope

This research will be limited to Dutch financial institutions, this means organizations of which an office is located in The Netherlands and which core business it is to provide financial services to its clients (for example: banks, insurance companies, and pension funds). These organizations have some specific characteristics which make them different from other Dutch companies. The most important are stated below:

- In general the processes require a lot of business knowledge (all knowledge which is necessary and specific for the company's operations belong to business knowledge, examples include knowledge about the domain, process, and legislation). This is usually specific to the Dutch market and changing relatively fast at the moment because of new rules and legislation like Wfd (Ministerie van Financiën, 2006) and WIA (UWV, 2006).
- Dutch financial institutions spend a considerable part of their total turnover at IT. Cost reductions through offshoring will be worthwhile because it will also be a considerable cost saving to the organization as a whole.
- There is fierce competition at the market caused by a number of important players. This makes it necessary to cut costs in all parts of the organization. This is illustrated by the fact that local branch offices are closed (Crone, 2006) and cost savings in the IT department are necessary (Hillenius, 2006).

1.7. Conclusions

All the aspects which are important to this research are discussed in this chapter. It started by introducing all the external parts which are important to the research:

- *Offshoring and outsourcing:* offshoring means conducting work abroad. Transferring work to another party is called outsourcing.
- *Yellowtail:* Yellowtail is an organization which delivers IT project management, business consultancy and architecture services. They have initiated this research.

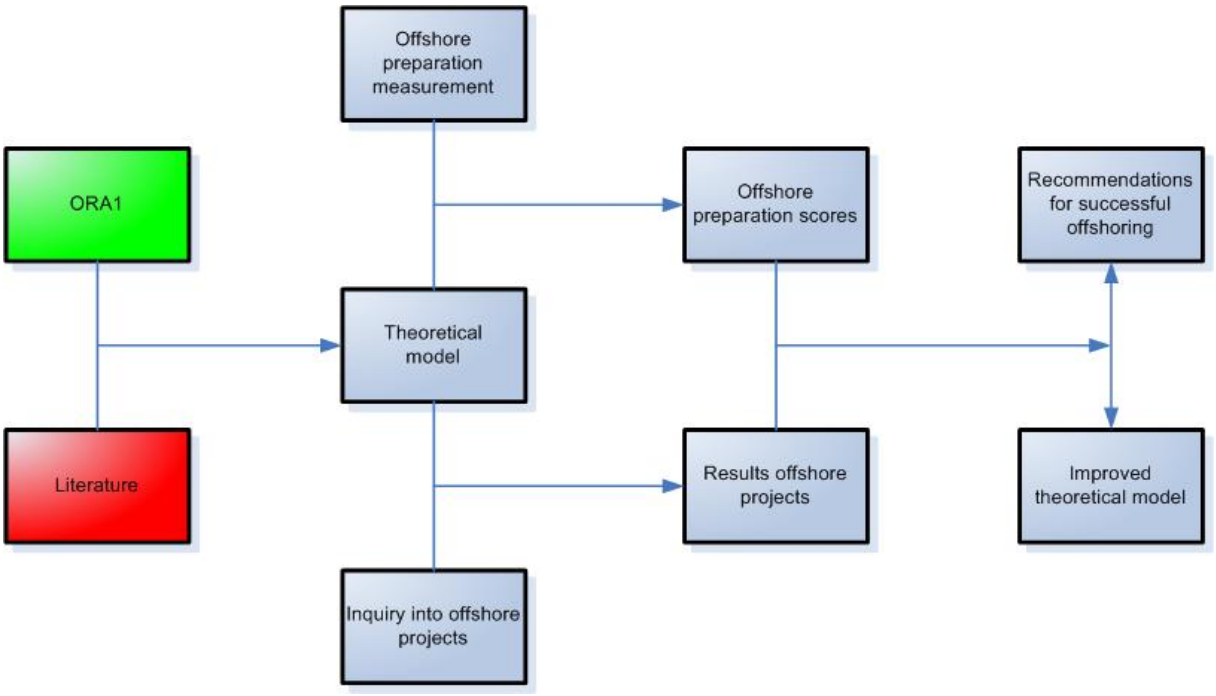
- *Offshore Readiness Assessment 1 (ORA1):* ORA1 was conducted by Yellowtail two years ago and assessed the degree to which Dutch financial service providers were prepared to offshore their IT work. This research is a follow-up study based on ORA1.

The objectives of this research have been stated next after these external parts. This research has five objectives:

- *Improve theoretical model:* The theoretical model of ORA1 will be improved first before the actual research takes place.
- *Measure offshore readiness and mindset:* This research (ORA2) will measure how well Dutch financial institutions are prepared for offshoring their IT work. This measurement will distinguish between their readiness and mindset with respect to IT offshoring.
- *Measure change in offshore readiness and mindset between 2004 and 2006:* The degree to which the Dutch financial institutions are prepared will be compared to 2004, which is assessed by ORA1.
- *Provide recommendations towards successful offshoring:* Recommendations to successful offshoring will be provided based on the findings from the research.
- *Further explore the limitations of the research and provide directions for further improvements:* Improvements to the research will be provided based on all the experiences gained throughout the research.

The second and third objectives are most important during this research. They will prevail in case objectives conflict. Research questions have been identified to make the objectives more operational.

Chapter Two: Literature



This chapter and all the next ones will start with the graphical representation of the research approach. Green blocks are already discussed in previous chapter(s), red blocks will be treated in the current chapter while blue blocks will be examined in later chapters.
ORA1 is discussed in the previous chapter, as can be seen from its green colour. This chapter will treat relevant literature and thereby contributes to the answer at the first research question (*Which factors contribute to successful offshoring?*)

2. Literature Study

This chapter will present a couple of authors who wrote about offshoring. Two of them, Julia Kotlarsky and Leslie Willcocks, will be discussed profoundly while less attention will be paid to the others.
Julia Kotlarsky wrote her PhD study about *management of Globally Distributed Component-Based software Development projects* (GD CBD) (Kotlarsky, 2005). Subsequently Leslie Willcocks will be referred, as he developed a building block approach which describes the steps a company must pass in order to successfully carry out an *Information Technology Outsourcing* (Willcocks, 2005) project.
Kotlarsky is selected to be studied because she profoundly studied four GD CBD projects. In fact GD CBD projects are a special kind of offshore projects. They comprise projects which are often conducted at three or even more locations in different countries, but at least two. She limits herself to Willcocks' govern stage of GD CBD projects and she carefully describes the best way to execute this stage.
Willcocks is selected because he describes the whole outsourcing process, from considering whether outsourcing would be the right option for an organization to the evaluation of a project. This whole scope is also chosen in this research. Willcocks provides a lot of information regarding management of an Information Technology Outsourcing (ITO) project.
Ravi Aron (2005), Eran Carmel (2002) and Geoff Walsham (2005) are selected to be studied, although less profoundly than Kotlarsky and Willcocks, because they all describe a specific part of offshore projects. This serves as a contribution to the broad view which Kotlarsky and Willcocks take.

2.1. Kotlarsky

Kotlarsky (2005) carried out research into the *management of Globally Distributed Component-Based software Development projects* (GD CBD). She conducted case studies at four companies which executed GD CBD projects. She developed a theoretical framework regarding successful execution of GD CBD projects based on literature and case studies.

Globally Distributed Component-Based software Development projects
During the last few years companies are turning to global sourcing of their software development. The main reason is the low labour cost of qualified software engineers in India and Eastern Europe. This shift in the IT sector requires GD CBD, so different components can be made across the globe, plugged together and sold to the customer. The best location for each component can be chosen on whatever criteria the organization wishes.

Theoretical framework
Kotlarsky used a theoretical framework in order to analyze the cases. The framework (figure 11) contains five success factors which were to predict the success of the project. Kotlarsky formulated GD CBD success as: product success, personal satisfaction, successful collaboration, and bridged gaps. These five success factors are stated and explained below:

1. *Inter-site Coordination*: The managerial practices that can facilitate coordination between teams.
2. *Appropriate Tools and Technologies*: The tools and technologies that are required to support GD CBD
3. *Social Ties*: The managerial practices that can create and maintain social ties between remote team members.
4. *Knowledge Sharing*: The managerial practices that can facilitate knowledge sharing between remote teams.

5. *Components Management*: The practices that can facilitate components management.

She identified the first four factors from *Information Systems* (IS) and *Organizational Behaviour* (OB) literature. The fifth success factor, components management, emerged from the case study data.

22 Managerial practices (figure 9) were perceived as important to GD CBD in the studied cases. Each of these best practices pertains to a single success factor, this way the framework given beneath emerged. The success factors are stated in bold in the dashed circles and the best practices are given in the white ellipses placed inside the corresponding success factor.

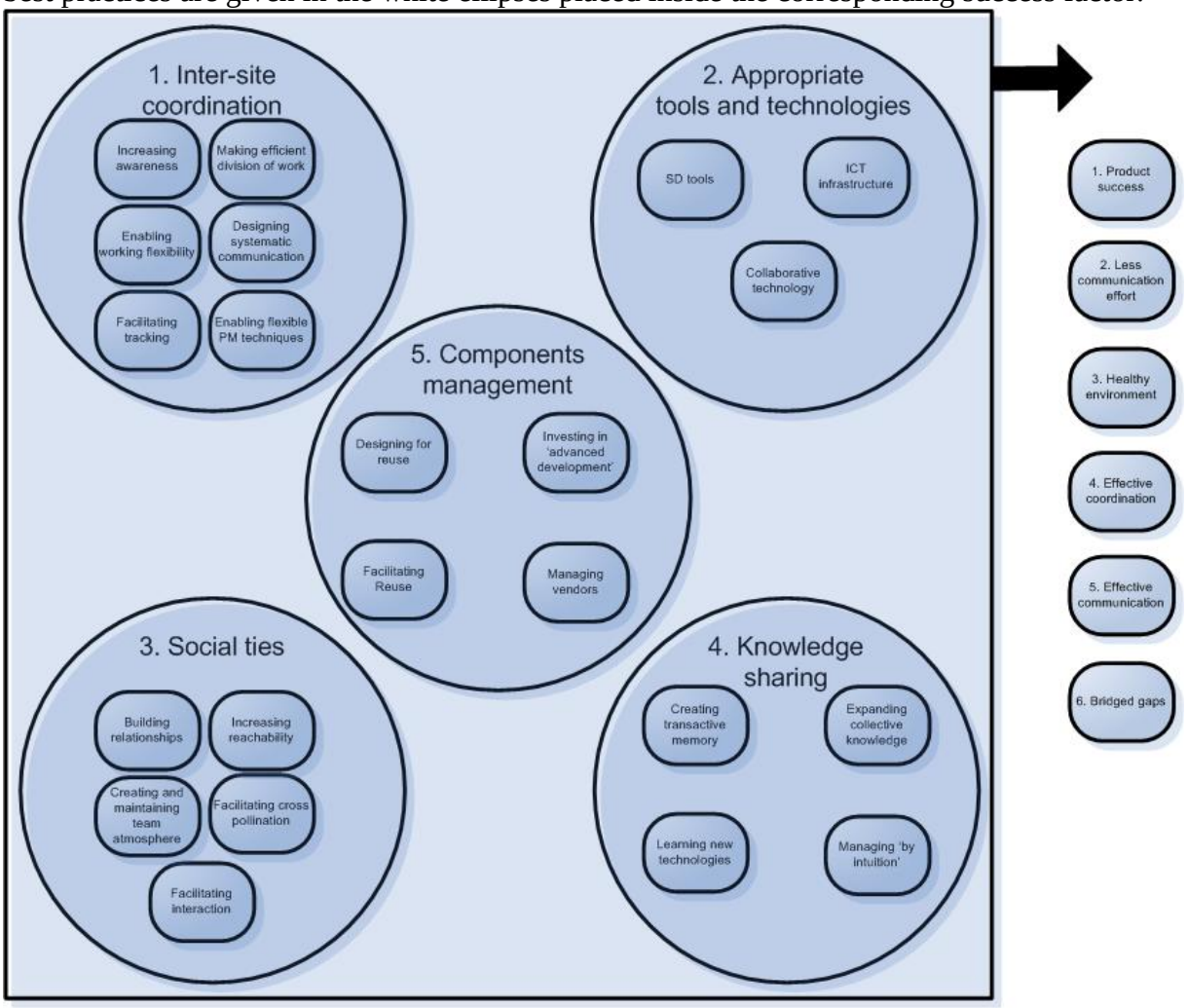


Figure 11: Overview Kotlarsky's research

Kotlarsky also explained why each best practice was perceived as important during the case studies. The reasons as given by Kotlarsky follow below.

1 Inter-site coordination

Increasing awareness: The possibility of misunderstanding, conflicts, and coordination breakdown will be reduced if teams know what is going at the dispersed locations.

Enabling working flexibility: Teams can collaborate more in real time by working by means of flexible working hours.

Facilitating tracking: A well functioning issue track and trace system contributes to efficient cooperation between locations.

Making efficient division of work: A skills-based division of work between dispersed team members will be positively related to project outcomes if globally distributed teams have tight relationships and experience of working together. This can be based on technical, functional or domain skill. On the other hand a division of work based on

product feature will function better whenever distributed teams have loose relationships.

The motivation of dispersed teams to collaborate in the future will be hampered if the ownership of a module or component is changing throughout the project. Changing ownership of work packages between dispersed teams throughout the project will be negatively related to product success. It will also decrease motivation of dispersed team members to collaborate to a greater extent in traditional Globally Distributed Software Development projects (GDSD), than in CB projects.

Designing efficient communication: Misunderstanding and conflicts can arise when people with different national and cultural backgrounds cooperate over distance. This possibility can be decreased by paying attention to the style and content of communication and agreeing upon rules regarding the style and frequency of communications. This will be positively related to the effectiveness of dispersed communications and to personal satisfaction.

Enabling flexible project management techniques: Too detailed planning of hourly or daily tasks will decrease the performance of teams. It is better to keep planning flexible and not too detailed, for example by using weekly milestones. Planning of major project phases with clear objectives for each dispersed team will be positively related to successful delivery of project objectives.

2 Appropriate tools and technologies

Software development tools: Standardization of tools across locations and centralizations of tools in a single development platform/environment will be positively related to greater reuse rate (number of components being reused across different projects/products).

Collaborative technology: Effective communication between members in globally dispersed teams can best be attained by providing a wide range of collaborative technologies rather than imposing specific types of communications. Team members who have already developed rapport will use online chat to communicate more often than team members that do not have such rapport.

ICT infrastructure: Dispersed teams will collaborate more effectively and efficiently if they are equipped with the same ICT facilities (i.e. similar network speed, server, applications) as the co-located teams. Success of project outcomes will be greater in this case.

3 Social ties

Building relationships: Building relationships is considered to be very important to success and involves building rapport and trust between remote team members. Interviewees indicated that the best way to build relationships is to meet face-to-face.

Creating and maintaining team atmosphere: Creating and maintaining team atmosphere between dispersed teams is positively related to personal satisfaction and motivation to collaborate in the future. It will reduce the possibility of coordination breakdowns and conflicts between the teams.

Increasing reachability: It is easier to reach the right people at the remote location if a transactive memory is created. The length of the project is likely to be reduced if the reachability between the dispersed team members is reinforced. The ability to reach the right people at dispersed locations is higher in the cultures with less personal distance or that are more informal (e.g. in collectivist cultures, according to the Hofstede (2003) cultural dimensions)

Facilitating cross-pollination: Cultural gaps between team members will be reduced if cross-pollination is facilitated. Globally distributed teams in which social ties such as rapport and trust are developed will be more effective and efficient in achieving

collaborative project outcomes than teams where social ties are not developed. More efforts by managers, and more investment in terms of time and money, are required to build up rapport and trust if dispersed teams belong to different national cultures.

Facilitating interaction: Facilitating interactions is positively related to building up rapport and trust between dispersed team members. Face-to-face meeting will improve understanding between remote counterparts and increase effectiveness of communications over distance. Rapport and trust (confidence, mutual respect) between remote team members will improve understanding between remote counterparts and increase efficiency of communications over distance.

4 Knowledge sharing

Creating transactive memory: Creating transactive memory among dispersed team members is positively related to collaborative project outcomes (e.g. it will reduce project lifecycle).

Learning new technologies: If globally distributed team members learn new technology in a co-located environment, they will develop more extensive collective knowledge and transactive memory than if training is organized for each dispersed location separately.

Expanding collective knowledge: Expanding collective knowledge of a dispersed (project) team is positively related to collaborative project outcomes (e.g. will reduce a possibility of misunderstandings and conflicts and reduce project lifecycle). Expanding common knowledge about national and organizational cultures is (i) positively related to personal satisfaction and effectiveness of communications over distance, and (ii) will reduce the possibility of misunderstandings and conflicts. Expanding collective knowledge related to product architecture and achieving common understanding between key people are likely to reduce project lifecycle.

Managing 'by intuition': Rapport with remote team members and awareness of what is going on at dispersed locations are positively related to the ability of a manager of a globally distributed team to manage ‘by intuition’. The ability of a manager of a globally distributed team to manage ‘by intuition’ (i.e. catch signals, sense that something is working or not working properly) will reduce the possibility of coordination breakdowns and increase the effectiveness and efficiency of a globally dispersed team.

5 Components management

Designing for reuse: Development costs and lifecycle in the long run will be decreased by applying a design-for-reuse strategy during the development of a product family at a CBD project. The development and lifecycle cost will in particular be lower after multiple new releases while they may be higher during the first few releases.

Facilitating reuse: GD CBD teams that divide work based on skills will achieve higher reuse rates than teams that divide work based on geographical location (i.e. when dispersed teams work on different parts of the project). It is unlikely that people know about reusable components which are developed at a remote location if work is divided based on geographical location, unless formal meeting are arranged in which reuse possibilities are discussed.

Investing in 'advanced development': In CBD approaching the development of a new product as an R&D project is positively related to the ability to reuse components in future products and will reduce development costs and lifecycle in the long run.

Managing vendors: GD CBD project may involve vendors that deliver third-party components. Development lifecycle will in such case be reduced if coordination of all development work (internal dispersed development sites and external vendors) is centralized. Centralization of coordination of work carried out by all parties involved in

the GD CBD project under one function is more important if more vendors are delivering third-party components.

It is not necessary to be proficient in all the 22 best practices, as turned out in the case studies. In fact there was no case where all the best practices were visible, table 3 shows the number of best practices at each success factor found in every case. Three out of the four cases were classified as successful, with the Baan case being the only unsuccessful one.

	Inter-site coordination (out of 6)	**Tools and technologies (out of 3)**	**Social ties (out of 5)**	**Knowledge sharing (out of 4)**	**Components management (out of 4)**
LeCroy	6	3	5	3	2
SAP	5	3	4	3	1
TCS	6	3	4	3	4
Baan	0	3	0	0	0

Table 3: Case study scores Kotlarsky

Checklists
Kotlarsky also developed some checklists for managers, based on this framework. Each checklist describes some activities that need to be done or taken into account. The following checklists were developed: one needed to be completed before a face to face meeting, one that is to use after a face to face meeting and one that guides managers by selecting the appropriate tools and technologies. The checklists consist of all kinds of activities, which can be checked when done. This way the manager gets an easy overview of the activities remaining to be done.

2.2. Willcocks

Information Technology Outsourcing (ITO) is a still growing phenomenon that outlived the five year period which is usual for a management fad. Willcocks (2005) emphasizes the fact that organizations need to consider ITO seriously since it offers a lot of advantages, with lower cost as the main reason.
Willcocks developed a building block approach in order to manage ITO successfully. The approach consists of eight blocks which organizations need to pass in a cyclical fashion, as can be seen in figure 12.

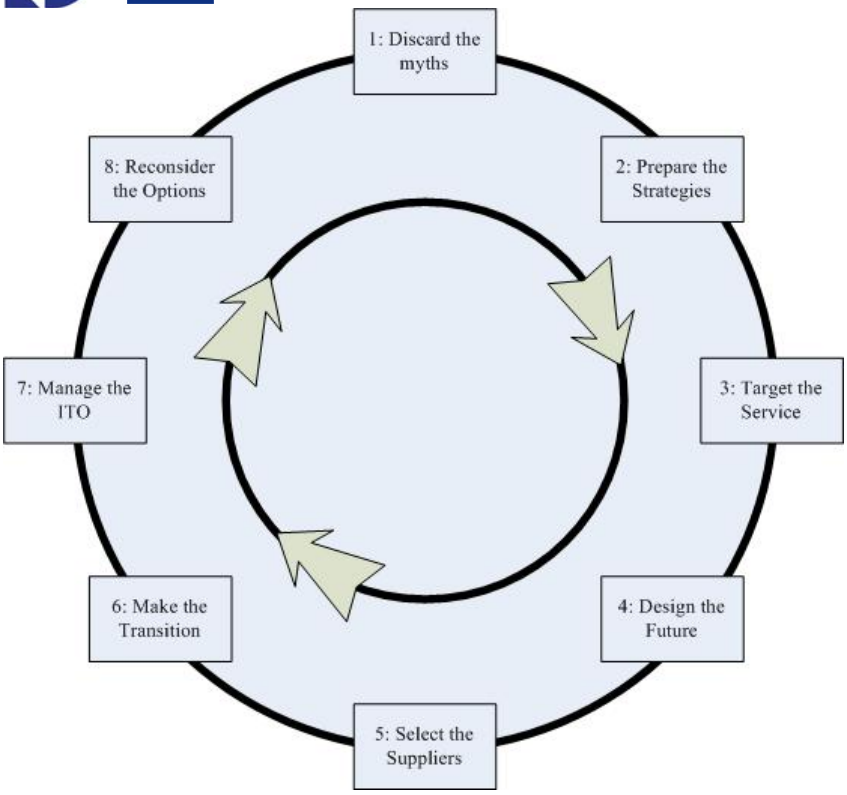


Figure 12: Willcocks' building blocks approach

The eight blocks can be divided into three main stages, the architect, engage, and govern stage. The architect stage comprises the first four building blocks, here the company devises the complete ITO plan. This can be done internally in the organization. The fifth and sixth block make up the engage stage, at this time the organization proceeds to the offshore market and finally makes the transition. The govern stage consists of the last two blocks and deals about the management and possible closedown of the ITO.
An organization once need to start at the first building block, subsequently it needs to pass all the blocks to arrive eventually at the eighth block. At this point it is time to reconsider all the options again and maybe start outsourcing all over again during a new project. Of course the lessons learnt during the previous outsourcing projects need to be taken into account.
The next eight paragraphs will all be dedicated to a single building block and explain all the activities pertaining the block concerned.

Block 1 - Discard the myths: gather acumen
It is very important for an organization not to believe everything one is told about ITO. Some stories about ITO take almost mythical proportions. An ITO project will not meet expectations in practice whenever an organization starts an ITO project accompanied with such prospects. Willcocks recalls eight widespread myths (Willcocks, 2005, p. 4-14) about ITO which are unfortunately all but truth:

1. *"ITO is much like outsourcing anything else (e.g. premises security, catering, rubbish disposal)."*
2. *"Vendors have inherent advantages in superior management practices and economies of scale. Therefore they will achieve lower IT costs while improving service."*
3. *"Long-term single supplier deals secure partnering relationships, lower transaction costs and greater business advantage."*
4. *"Outsourcing IT is about spending as little as possible and monitoring outcomes, not managing. That can be left to the supplier."*

5. *"Drive the hardest commercial bargain possible. The supplier will look after its own profit margin. The contract is everything."*
6. *"Outsource your IT problems. The market is now mature enough to provide superior capability to handle them."*
7. *"Client and supplier buying shares in each other secures superior partnering, technical innovation, risk sharing and greater business leverage."*
8. *"Anything is going to be better than our present IT department."*

An organization needs to get over ideas as stated above by gathering acumen concerning the strategic benefits ITO has to offer. Market intelligence needs to be collected by all kinds of sources. Offers can be requested at suppliers which are possible candidates. It is important to question the proposal offered. Maybe the supplier is not really able to deliver as he is promising. Factors on the macro level also needed to be taken into account, for example the political and economical stability of the country or region under consideration. An organization can only proceed to the next block when it has a clear vision why it wants to engage in ITO.

Block 2 - Get equipped: prepare the strategies
ITO will only succeed when a good ITO strategy is used, this strategy must comply with the business strategy. The organization must question itself where it is now and where it wants to be in the future. This desired state can be achieved by means of the ITO strategy. Willcocks offers three tools in order to formulate the strategy:

1. *Market, Competence and Advantage (MCA) model*: This framework provides directions to the proper sourcing strategy of the organizations. The underlying theory is that an organization can take their hands of the commodity functions but cannot release their core business. The MCA model uses three input dimensions to determine this value: maturity of the suppliers and markets, the organizations relative competence in the product and the importance in terms of the organization's sustainable competitive advantage.
2. *Decision Tree*: The decision tree is a high level tool which shows whether outsourcing is indeed the right choice. It can also recommend to discontinue or insource the activity.
3. *Modes of Outsourcing*: There are a lot of different modes of outsourcing available, each comes with his own advantages and disadvantages. The best mode depends upon the ITO strategy. The modes are: Transitional Outsourcing, Value-added Outsourcing, Equity Holdings, Co-sourcing, Multiple Suppliers, Spin-offs, Application Service Provision, Business Process Outsourcing, Backsourcing, Shared Services, Offshore Outsourcing, and Joint Venture.

Block 3 - Identify the right activities: target the services
Willcocks recommends a five step approach to select the activities which needed to be outsourced. The five steps are:

1. *Map the service*: dissect the service into all the activities carried out.
2. *Establish the criteria*: the long and short term rationale and barriers are identified here.
3. *Apply each criterion*: apply each piece of the service, as dissected in the first step, to the established criteria.
4. *Aggregate the results*: combine all the criteria into a total picture.
5. *Determine priorities and service bundles*: select the appropriate services to outsource, based on the previous findings. Bundle the services if possible.

Although each company can make this service selection for itself, some general guidelines apply. A service which pertains to the core business and where a company has a competitive

advantage over competitors should never be outsourced. Besides some services are more suitable for outsourcing because of their nature. Table 4 shows how well a certain service is suited for outsourcing for some different technical areas.

	Technical areas										
	Hardware			**Communications**			**Applications**				**Overall score**
Services	PC	Alpha	Serv-ers	Infra-structure	Voice	Data	Market-ing	Finan-cial	HR	OA	
Strategic planning	2,3	2,3	2,3	3	3	3	1,2,3	1,2,3	1,2,3	2,3	Good
Feasibility Studies		1		2	2	2	1,2	1,2	1,2	2	Average
Business analysis	1,2			1,2	1,2	1,2		1,2	1,2	1,2	Poor
Software development	1,2			n/a	n/a		1,2	1,2	1,2	1,2	Good
Data warehouse	1,2	1,2	1,2	n/a	n/a	n/a	1,2	1,2	1,2	1,2	Good
User interface	1,2	1		n/a	n/a		1,2	2	2	1,2	Good
Support	1,2	1,2	1,2	2			1,2	1,2	1,2	1,2	Good
IT management	1	3	3	3	3	3	3	2,3	2,3	2,3	Poor
Project management							1,2		2	2	Average
Network management	1,3	3	3	1,2,3	1,2,3	1,2,3	n/a	n/a	n/a	n/a	Poor
Facilities management	n/a	3	3	3	3	3	3	2	2	2	Poor
Asset management	1	3	3	3	3	3	2,3	2,3	2,3	2,3	Poor
Backup	1		1			1	n/a	n/a	n/a	n/a	Good
Disaster recovery	1			1	1	1	1,2	1,2	1,2		Good
Security	1,2	1,2	1,2				1,2	1	1	1	Good
Audit	1,2	1,2	2				1	1	1		Good
Training	1,2	2	2	2	1,2	1,2	1,2	1,2	1,2	1,2	Good
Helpdesk	1,2	1,2	1,2	2	2	2	1,2	1,2	1,2	1,2	Good

Table 4: Service outsource suitability
(1: Short term reasons, 2: Long term Reasons, 3: barriers)

An overall result for each service is given in the right column. There is also a directive for each cell in the matrix, according to the set of numbers in it. These recommendations regarding outsourcing of a service belonging to a cell are as follows:

- Only 1: Outsource
- Only 2: Maybe, could be achieved by other means
- Only 3: Do not outsource
- 1 and 2: Outsource
- 1 and 3: Proceed with caution
- 2 and 3: Probably not
- 1, 2 and 3: Proceed with caution

Block 4 - Ensure the results: design the future
This building block translates the desired ideas from the three previous blocks into a commercially sound framework. Six steps are necessary in order to make this translation:

1. *Vision the attributes of the future arrangement*: This concerns how the relationship, governing documents and the entire framework is to function.

2. *Develop the Service Level Agreement (SLA) and Key Performance Indicators (KPIs)*: The SLA defines the performance measures of the ITO and is based on the previously stated future arrangements. The KPIs are the indicators which are measured in order to determine whether the supplier complies with the SLA. Good KPIs are relevant, readily available, simple, and understandable.
3. *Formulate the pricing model*: The pricing model can vary from completely fixed to completely variable and everything in between. Factors that can influence the most appropriate pricing model are the predictability of the demand/use of the service, predictability of the cost to provide and the financial flexibility of the organization. Each organization must choose how they want to be charged. Reasons that can play a role in this consideration are meeting internal financial needs, comparability of bids and management of the payment process.
4. *Draft the contract*: The key to a good contract is fairness and comprehensibility. It forces both parties to define the responsibilities, expectations, protocols, etc. A robust contract will pave the way to a good relationship, although it is impossible to foresee all the possible issues that might occur.
5. *Model the relationship behaviour*: Although the contract offers the legal obligations regarding the relationship, it provides fewer guidelines to the daily mode of operations. This daily behaviour is determined by the underlying values.
6. *Plan the future management*: ITO does not mean the disappearance of IT management, only a change in management. The IT manager needs to change the focus to direction, strategy, and implementation rather than routine service delivery and staff management.

Block 5 - Commercial mating: select the supplier(s)
This is the first block of the engage phase and a rather important one. Cost can begin to rise above expectations in this block. Any parts that are forgotten during the previously four blocks will also appear right here. As a good building requires a solid architectural plan, a successful ITO project requires a good architectural plan made in the previous four blocks. A vigilant selection process is necessary to choose the best supplier. Most organizations employ a tender to select their best ITO supplier. There are some cases in which tendering might not be the correct option, these cases are stated below:

1. *Only one supplier is suitable*: Obviously it makes no sense to do any selection process since the suitable supplier will get the ITO anyway.
2. *The organization is an informed buyer*: The organization is perfectly aware of the market prices and industry norms and will there get the best from any supplier.
3. *The organization knows exactly what it wants*: An organization that is able to set up an effective contract, SLA, and price model can just pick a supplier who wants to carry it out.
4. *Speed is more important than cost*: if speed is really an issue an organization may better choose a supplier quickly against higher costs.
5. *The organization is an experienced outsourcing manager*: in this case the organization can manage the supplier himself instead of the market.

Block 6 - The starting gate: make the transition
Officially, the transition begins at contract commencement and ends on a date specified in advance or by the signing of a transition acceptance form. However, the transition state often becomes a permanent state in practice. During the transition state the IT-work is actually moved to the supplier. The five things stated below need to be transferred:

1. *Assets*

2. *Staff*
3. *Third Party Contracts*
4. *Knowledge/Information*
5. *Work in Progress*

The staff transfer is in general the most difficult part. Probably a lot of employees do not like the outsourcing project. Some will fear that they will be fired because their job will be handed over to the supplier, others will be afraid to be transferred to the supplier. There are two approaches to manage the transition, one is *clean break* in which the supplier is completely responsible for the future employment of the staff deemed excess. *Negotiated transfer* is the other approach, in this approach the supplier and outsourcer decide together on these employment issues.

Block 7 - Get the results: manage the ITO

The organization is supposed to reap the benefits of all the preparatory work during this block. Eleven critical success factors are provided in order to measure if the benefits are actually experienced. They are shown beneath accompanied by their indicators. (Willcocks, 2005, p. 173)

1. *Delivery Performance*: Improved service and accuracy in response to work requests, maintaining systems availability, responsiveness, reliability, adherence to agreed service levels, continuous improvements, service quality
2. *Good Contract Management*: Outsourcer's management capability, improved management, commitment of senior executives, focus on management of relationship, and outcomes, supplier's management are IT professionals, overall management retained in-house, strong and active management of contract, in-house staff capable of monitoring performance, competent outsourcing/implementation project manager.
3. *Strong Relationships*: Strong personal relationships, team approach, mutual recognition of needs and capabilities, good business and commercial relationships, trust, partnership, good understanding between parties, common goals
4. *Staff Management*: Continuity of staff, quality of individuals, availability of staff with the right skills, resolution to in-house staff turnover issues, key employees to be transferred staff, staff to be assigned to contract on a long term basis.
5. *Cost Management*: Meeting or exceeding cost saving targets, delivering cost benefits, improved cash flow, reduced capital expenditure, value for money, profitable for supplier, clear understanding of real costs
6. *Understand the Customer*: Supplier understands customer's business and priorities, supplier has good knowledge of customer's sites and their peculiarities, supplier gets up to speed as quickly as possible at the start of the contract, supplier understands customer's requirements, mutual understood definition of expectations
7. *Use SLAs*: Supplier meets service levels and reports on them, good SLA which includes clear and unambiguous service definition, service levels and responsibilities, KPI, clarity of purpose, clear specification of benefits, and ongoing monitoring of their achievements
8. *Maintain Control*: Control of the arrangement, tender regularly – keep them competitive, clear lines of demarcation
9. *Be Flexible*: Flexible working arrangements, ability to change, no predetermined idea (clean-slate approach), a win-win flexible contract, empathy with changing business needs, ability to vary resources to meet task requirements
10. *Communicate*: Clear and open communication between parties, ongoing communication, effective communication

11. *Technical Expertise*: Technical skills of outsourcer individuals, expertise in their fields, good knowledge of job, good knowledge of specific business applications

Block 8 - Do it again: reconsider the options
Eventually the contract will end, either because it reached the natural end of its term, or because it was terminated early. A new way to carry out the service needs to be devised, for whatever reason the contract was ended. The organization can choose from three alternatives:

1. *Keep the incumbent supplier* for all or part of the scope and agree on a new contract.
2. *Re-tender* all or part of the scope, which may also result in keeping the same supplier in case he has the best offer.
3. *Backsource* all or parts of the scope i.e. bring the service back home.

In practice a combination of these three is chosen, some activities stay at the incumbent supplier, other are transferred to a new supplier and some are taken back home or even eliminated at all. At this point it is time to start all over again at the first block. This time the organization is equipped with a lot of knowledge from the current outsource project which will probably results into a more successful next project.

2.3.Aron

Ravi Aron (2005) emphasises the risks that are associated with offshore outsourcing. In his opinion offshore outsourcing all comes down to: “Proper outsourcing is not outsourcing as much as possible, or doing so at the lowest possible five-year price; proper outsourcing is about achieving the very best long-term risk-adjusted rate of return.” Aron distinguishes four types of risks which a company should address separately:

- *Strategic risks*: Risks that result from opportunistic behaviour of one or both parties (buyer and supplier)
- *Operational risks*: Risk of suboptimal output that results from a variety of cases, including complexity of operations, geographic separation between client and vendor, and the limitations of the communications and transmission systems between the two.
- *Intrinsic risks of atrophy*: Over time, as a company outsources an activity completely, it loses the core group of people who were familiar with the activity and have the expertise to execute the activity in-house.
- *Intrinsic risks of location*: Caused by moving activities to remote locations. These include geopolitical risks, sovereign risk, or exchange rate risk. These are risks associated with different regions with their different socio-political systems and different historical contexts.

These four types are all different in their nature and their impact depends on the characteristics of the specific project involved. It may be possible to mitigate some risks. These (mitigated) risks must be taken into account when devising a proper offshore outsourcing plan

2.4.Carmel

Eran Carmell (2002) developed a four stage offshore maturity model. It also recommends how to move up in the maturity mode. This Sourcing of IT work Offshore (SITO) stage model discerns the following four stages:

1. *Offshore bystander*: No offshore sourcing; domestic sourcing only.
2. *Offshore experimenter*: Experiments with offshore sourcing on an ad hoc basis
3. *Proactive cost focus*: Sourcing of non-core work is encouraged at offshore centres, with the goal of cutting costs; offshore management mechanisms emerge.
4. *Proactive strategic focus*: Core IT work is sourced to offshore centres, with the goal of achieving competitive advantage; distance management mechanisms are mature.

Most companies start in the first stage but can move up in the model. An organization enters the second stage when it engages in offshoring. This second stage is not sustainable. Companies will either move on to the third stage if it acquires positive results from its offshore operations and is starting to develop a strategy regarding offshoring. Otherwise the company will fall back to the first stage. Reducing cost is offshoring's main objective in the third stage. A company enters the fourth stage when offshoring is used to fulfil a range of strategic objectives, rather than just cost savings.

2.5. Walsham

Geoff Walsham (2005) developed a theoretical basis which can be used to analyze cross cultural conflict, contradiction, cultural heterogeneity, detailed work patterns, and the dynamic nature of culture. Walsham composed a template which can be used to analyze a case according to his model. This template consists of four factors which come with related sub factors and is shown in table 5.

Structure	• Structure as memory traces in the human mind • Action draws on rules of behaviour and ability to deploy resources and, in so doing, produces and reproduces structure • Three dimensions of action/structure: systems of meaning, forms of power relations, set of norms • IS embody systems of meaning, provide resources, and encapsulates norms, and are thus deeply involved in the modalities linking action and structure
Culture	• Conceptualized as shared symbols, norms, and values in a social collectivity such as a country • Meaning systems, power relations, behavioural norms not merely in the mind of one person, but often display enough systemness to speak of them being shared • But need to recognize intra-cultural variety
Cross-cultural contradiction and conflict	• Conflict is actual struggle between actors and groups • Contradiction is potential basis for conflict arising from division of interest, e.g., divergent forms of life • Conflicts may occur in cross-cultural working if differences affect actors negatively and they are able to act
Reflexivity and change	• Reproduction through processes of routinization • But human beings reflexively monitor actions and consequences, creating a basis for social change

Table 5: Walsham's template for structurational analysis

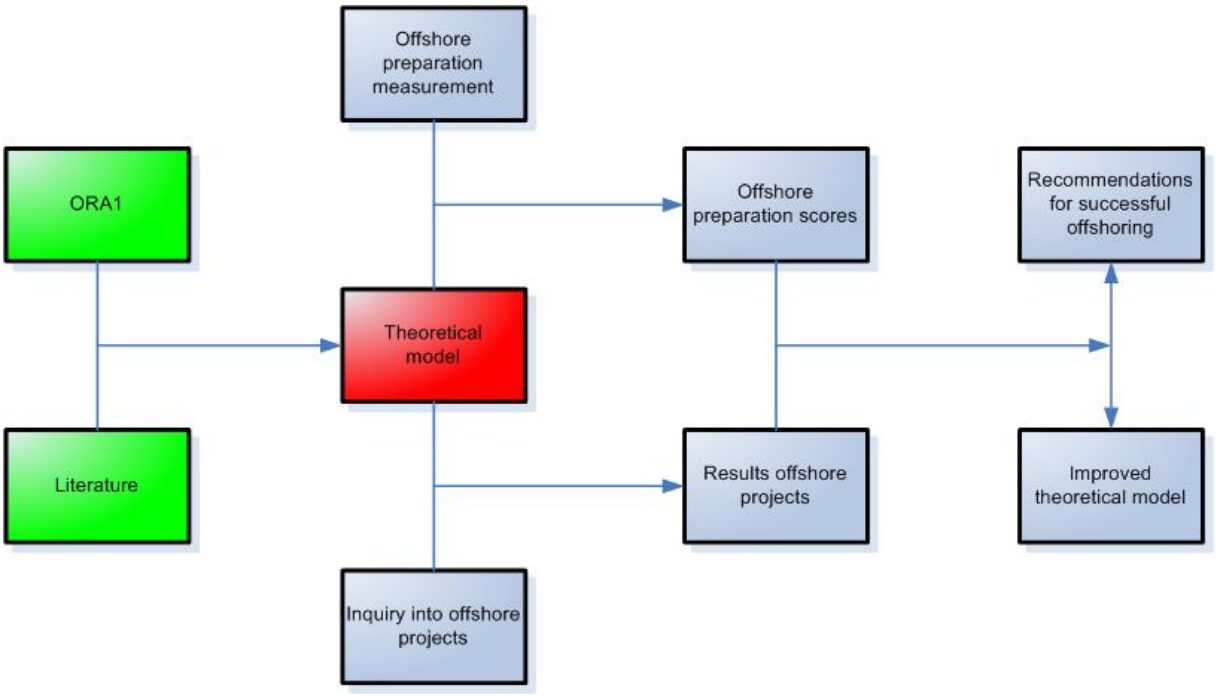
He uses concepts from structuration theory. The starting point underlying this theory is that human action and social structure is seen as a duality rather than a dualism. Instead of seeing human action taking place between two separate entities (dualism), action and structure are seen as two aspect of the same whole (duality). Hofstede is an example of the former who basically states that the differences in culture are the differences of each separate country's scores on the five cultural dimensions. Possible synergy effects are not taken into account, something this structuration theory does by addressing the set of countries as a whole.

2.6. Conclusions

Kotlarsky (2005) and Willcocks (2005) are using a rather different point view. Willcocks has a much broader approach in which he describes the whole process from the moment the

outsourcing idea pops up for the first time until the project is finished and evaluated. Kotlarsky only treats the moment after the company decided it wants to conduct a GD CBD project and describes profoundly how to set it up.
Kotlarsky's approach is focused around the five success factors and 22 best practices she identified. These are found during the extensive case studies she carried out. All the best practices were perceived in practice and believed to contribute to success in GD CBD.
Kotlarsky only studied three successful projects and one unsuccessful project. The unsuccessful project did not even meet the constraint of being a GD CBD project but it was chosen nevertheless, which is very peculiar. She developed best practices based on the practices perceived as import in these particular projects. It might be questioned whether these best practices apply to other project as well, maybe she had identified completely different practices if she studied other projects.
Willcocks emphasizes the cyclical nature of IT outsourcing. Each project is one loop through the circle and provides the organizations with more knowledge which it can use during its next IT outsourcing projects. Furthermore, Willcocks provides a lot of tools which can be easily employed in an IT outsourcing project, examples include the matrix which shows how well an activity is suited for outsourcing and the eleven critical success factors that can be used in order to determine whether the predicted benefits are actually experienced.
The weak point of Willcocks' research is where the information comes from. He provides some interesting tools but they appear out of the blue. He wrote a whole book about the building block approach but he uses only two references which are not written by himself or the other author Sara Cullen. This lacking scientific basis makes him a bit like an outsourcing guru who fails to apply important lessons from other experts.
Literature of three other authors haven been discussed briefly, Aron (2005), Carmel (2002), and Walsham (2005). Aron provides a detailed overview of all the risks that can be encountered during an offshore outsourcing project. Profound insight in the risks that come with offshoring is essential before it can be decided to move operations offshore. Risks can be too high which will cancel the offshore project, risks can also be so severe that they need to be mitigated before the offshore project can actually start.
Carmel identified four different stages which describes the offshore maturity of a company. Most companies start in the first stage in which they do not engage in offshoring. They reach the second stage if they start offshoring. From here they can fall back to the first stage or go further up in the model to the third or fourth stage, in which offshoring respectively brings costs savings or fulfils a wide variety of strategic goals.
Walsham developed a template which can be used to examine cross-cultural working. This template takes the following four factors into account: structure, culture, cross-cultural contradiction and conflict, and reflexivity and change. Walsham's ideas are originated in the structuration theory which treats human action as a duality rather than a dualism.

Chapter three: Theoretical Model



The theoretical model used during ORA2 will be presented in this chapter. This model prescribes all the activities which need to be carried out in order to offshore successfully and thereby answers the first research question (*Which factors contribute to successful offshoring?*)

3. Theoretical Model

The theoretical model used during this research will be presented in this chapter. The model is derived from different sources i.e. the model used during ORA1 as discussed in the first chapter and the literature from Kotlarsky, Willcocks, Aron, Carmel, and Walsham as described in the previous chapter. This theoretical model prescribes how to execute an offshore project, i.e. from its initiation until the final evaluation.
Comparability to ORA1 was an important issue when designing this model. One major goal is to measure changes in offshore readiness and mindset. This change can only be measured reliably if the model would be about the same. The design of this theoretical model was therefore bound by the previous model. The basics of that model, such as the readiness and mindset matrix, could not be changed. Tradeoffs between improving the model and keeping it comparable had to be made. This resulted in a theoretical model which is shown in figure 13 and consists of three parts: context, process, and success. All the parts of the model will be covered in this chapter.

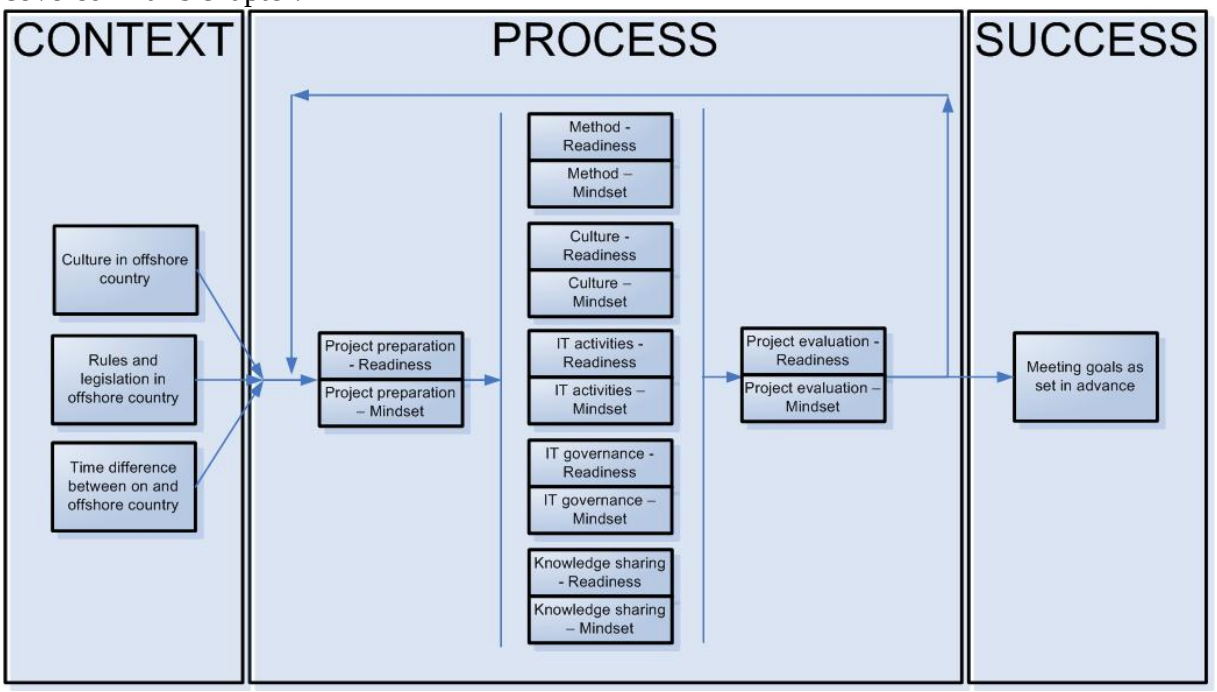


Figure 13: Theoretical model ORA2

3.1. Context

There are a lot of elements that belong to the context whenever an organization carries out an offshore project. The context contains every single element which is either outside the control or very hard to control by the organization, but which is important with respect to the offshore project. The contextual factors which are taken into account during this research are stated below:

- *Culture in offshore country*: Cultural differences will be encountered during almost all offshore projects since all popular offshore destinations have a culture rather different from The Netherlands'. Hofstede (2003) developed a model which can be used to quantitatively measure a country's culture. Culture in this contextual sense only relates to the culture in the offshore country while the success factor culture refers to the company culture of the Dutch financial institutions and their ability to overcome cultural differences.

- *Rules and legislation in on and offshore country*: The different offshore destinations have other legislation. Knowledge regarding the relevant legislation can greatly contribute to mitigate all kinds of risks. The most important legal issues with respect to offshoring can be found in appendix I.
- *Time difference between on and offshore area*: Time difference can be an advantage when people can take over each other's work so the project can go on around the clock. On the other hand, it can be a disadvantage when people need to collaborate since they do not work concurrently.

The context sets boundaries to the results the organization can eventually achieve with offshoring. Contextual factors can be very favourable with respect to offshoring which can lead to very good results for the offshore project, on the other hand less favourable contexts factors can cause mediocre results.

3.2. Process

The process depends upon the context. All the relevant contextual factors need to be taken into account during process design. The process is cyclical in this theoretical model, as can be seen in the theoretical model given above. This cyclical nature is derived from Willcocks' building block approach (Willcocks, 2005). Each project is a single iteration in the cycle. An iteration consists of three parts: offshore project preparation, execution by means of five success factors and offshore project evaluation. They will all be addressed separately in the next sections.
During this research readiness and mindset will be distinguished for each part in the process, just like in ORA1. To recall the definitions provided in the first chapter, readiness is the companies' state of being ready while mindset is the attitude towards offshoring. Readiness refers to tangible things (for example whether an organization has a system development method) while mindset refers to intangible things (for example whether employees in an organization judge a system development method as necessary).

Offshore project preparation
The preparation stage is similar to the architect stage as defined by Willcocks. The first building block Willcocks addresses, gather acumen, is very important although it might be easily overlooked. It is important to all stakeholders to agree upon the expected results and make them explicit, these expectations should be founded on the contextual factors and the experience gained in previous conducted offshore projects. All the contextual elements stated in the previous paragraph need to be analyzed and taken in account. Deceptions stemming from overstated expectations will be avoided this way. Tools Willcocks provides in the architect stage can come in handy here, an examples is the offshore service suitability matrix (table 4).
The final result of this stage is an offshore plan which prescribes how the five success factors are filled in. Each success factor will be discussed later in a separate section. The whole offshore plan does also need to comply with the context and the previous acquired experience. The organization can proceed to the actual offshore way of doing business whenever this is completed.

Execution by means of five success factors
In this model five success factor are identified which determine whether a project will be successful or not. These factors come from Kotlarsky and ORA1. Four of the success factors identified by Kotlarsky could be mapped to success factors from ORA1. Knowledge sharing was the only success factor which could not be mapped. Therefore it was decided to add

knowledge sharing as the fifth success factor so all five success factors of Kotlarsky could be mapped to ORA2. The mapping is illustrated in figure 14.

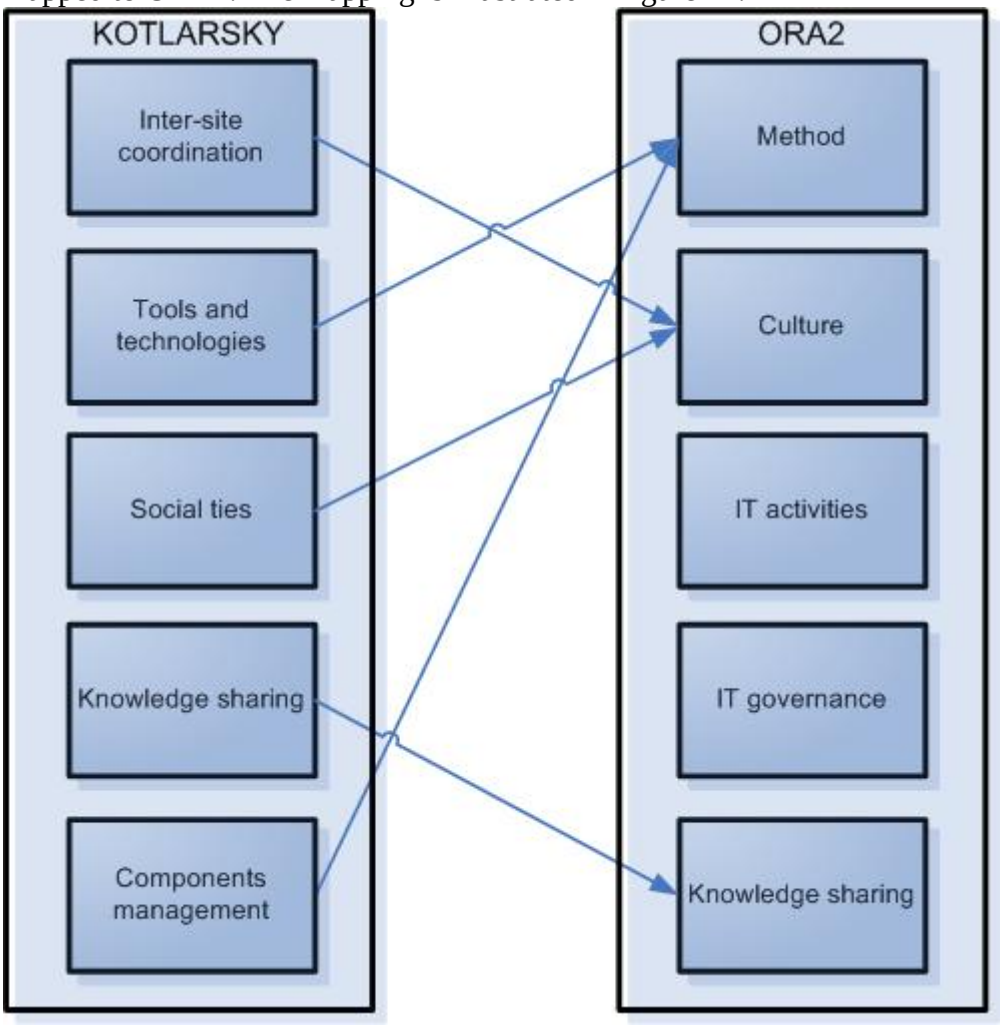


Figure 14: Mapping of Kotlarsky's research at ORA2

Each individual arrow represents a mapping which has been made. No success factors from Kotlarsky are mapped to the IT activities and IT governance success factor. This is because these two success factor describe the whole offshoring process, from preparation to evaluation. The theory behind these success factors comes from Willcocks, who also treats the complete process. The reasons for each map to be made are stated below:

Inter-site coordination → Culture
Inter-site coordination encompasses all the managerial practices which can facilitate coordination between teams. All best practices as identified by Kotlarsky (Increasing awareness, Enabling working flexibility, Facilitating tracking, Making efficient division of work, Designing efficient communication and Enabling flexible project management techniques) will contribute to a culture which is well suited to offshoring.

Tools and technologies → Method
Kotlarsky's Tools and Technologies success factor is about all the tools which are required for all stages of the development process. Tooling is one part of the method success factor because a good method enforces use of the appropriate tools and technologies (System Development Tools, Collaborative Technology, and ICT infrastructure).

Social ties → Culture
Practices which create and maintain social ties will be beneficial to a culture which is prepared for a smooth offshore way of working. All best practices stated here by Kotlarsky (Building relationship, Creating and maintaining team atmosphere, Increasing reachability, Facilitating cross pollination, and Facilitating interaction) can contribute to such a culture.

Knowledge sharing → Knowledge sharing
This is a copy rather than a map. Kotlarsky provided interesting best practices (Creating transactive memory, Learning new technologies, Expanding collective knowledge, and Managing by intuition) at this success factor which have been used in the research.

Components management → Method
The differences which can exist between Globally Distributed Components Based software Development (GD CBD) and offshoring emerge in this map. Nevertheless this map was made because offshoring can well be GD CBD. The best practices identified by Kotlarsky at this dimension (Designing for reuse, Facilitating reuse, Investing in 'advanced development' and Managing vendors) therefore also serve as a fine addition to this research.

Each success factor will be briefly introduced before the offshore project evaluation will be discussed.

Method
Offshoring benefits from processes that are structured and do account for the specific demands offshoring requires, e.g. miscommunications, time differences etc. Well known project management and system development methods like Prince2, DSDM, and RUP will contribute to successful offshoring.

Culture
This is an important success factor when it comes to offshoring IT-work at Dutch financial institutions. Approximately 20 percent of all Dutch offshore projects are taken back home due to cultural differences (Molenaar, 2005). It will be hard for an offshore project to succeed when the onshore employees do not master English or avoid using technology made somewhere else. This latter attitude is seen in different parts of society and is called the Not Invented Here syndrome (NIH) (Katz, 1982, p. 7-19)
As Hofstede (2003) points out "Culture is more often a source of conflict than of synergy. Cultural differences are a nuisance at best and often a disaster." Organizations need to be aware of this rather disappointing statement. By paying continuous attention to culture it can prevent the disaster and make culture just a nuisance.

IT activities
Some IT activities are a lot easier to offshore because of its nature. In general in would be harder to offshore IT work which is more complex, bigger or less suitable for reuse. It might also be more difficult to offshore activities that are of strategic importance to the business (Willcocks, 2005, p. 109-111). Another factor is the type of service it concerns, Willcocks provided a good table which describe the Service Offshore Suitability for a number of services (table 4).

IT governance
The way IT is managed within a company determines how likely offshoring will be. Offshoring will be more likely if there is more emphasis on cost reduction and efficiency.

Good contract management is necessary when an organization engages in an offshore project. It must be able to set up the right contractual forms. This encompasses designing the pricing model i.e. is it a fixed price project or is some variable form chosen, and designing the SLAs.

Knowledge sharing
Knowledge sharing is important in order to make an offshore project work (Kotlarsky, 2005, p. 304). It is very hard to devise an efficient knowledge sharing system, especially in large organizations (Wijnhoven, 1999, p. 165). A lot of miscommunications will arise whenever the relevant knowledge is not properly shared, employees working onshore will not be aware of the recent changes and the employees located offshore do not know about the latest requirements.

Offshore project evaluation
This is the final step in each offshore project. The project can probably be classified as successful when all previous stages are passed correctly. The next paragraph will describe the definition of success as used in this model. The major aim of the evaluation is to provide lessons for coming offshore projects and not to blame people.
A new offshore project can start after the completion of the evaluation. Goals need to be set higher during the next offshore project since the organization can learn from the previous mistakes and does not have to make them again.

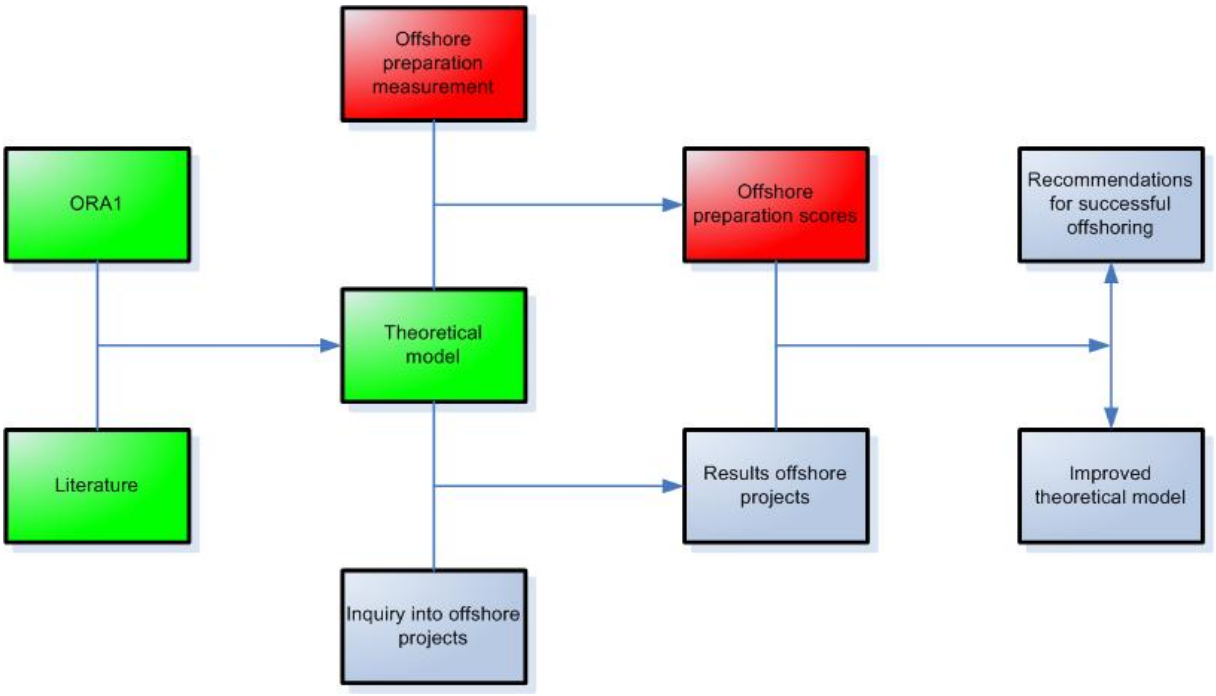
3.3. Success

Kotlarsky and Willcocks have a rather different definition of success. According to Kotlarsky, success always comes with product success, personal satisfaction, successful collaboration and bridged gaps. On the other hand, Willcocks state that success is dependent upon the expectations made in advance.
The definition of success (i.e. offshoring success) used here is pretty much the same as Willcocks'. The project can be called successful if the goals that were set in advance are met. This way an organization needs to improve continuously in order to stay successful since the goals are stated higher each project. Success is seen as something dynamic, it depends upon the context and offshore experience of the organization.

3.4. Conclusions

This chapter provided the answer to the first research question, which was "Which factors contribute to successful offshoring". It turned out that the answer was not a set of factors but a model that prescribes the activities an organization needs to carry out.
The model consists of three main parts, context, process, and success. The context consists of all the factors which are impossible or really hard to change by the organization when it is moving IT work offshore.
The process also consists of three main parts itself. First there is the preparation stage where the goals are set and an offshore plan is made. This first stage is based on the context and the experience gained in previous projects. The offshore operations can start when the offshore plans are completed. The company needs to pay continuous attention to the five success factors during this stage. The final part of the process stage is the offshore project evaluation, which extracts the lessons learned from the project. These lessons can prevent that mistakes would reoccur in the next project.
Success is the last part of the model, a project can be classified successful if it met the goals set in advance. Goals need to be stated higher every project because the organization learns from its mistakes.

Chapter four: Assessment interviews Offshore Readiness Assessment II



This chapter will present the results from the interviews conducted during ORA2. These results will provide the answers to the second and third research questions: *How well are the Dutch financial institutions prepared for offshoring in terms of readiness and mindset* and *What is the difference in readiness and mindset at Dutch financial institutions regarding offshoring between 2004 and 2006* respectively. The current readiness and mindset will be the answer to the second research question while the answer at the third one will be acquired by comparing this result with the result from two years ago. Furthermore the current situation regarding offshoring at Dutch financial institution will assist in answering the fourth research question: *Which lessons can be learned from previously conducted offshore projects and the current situation at Dutch financial institutions?*

4. Assessment interviews Offshore Readiness Assessment II

Two of the five objectives of this research will be treated in this chapter. Those objectives are: *Measure Offshore Readiness and Mindset* and *Measure change in Offshore Readiness and Mindset between 2004 and 2006*. This chapter will be divided in two parts according to these objectives. The first part will elaborate on the interviews and present the results. The next part is dedicated to a comparison of these results to the results from two years ago.

4.1. Assessment interviews Dutch financial institutions

Personal interviewing is selected as technique to collect data from the offshore projects and the Dutch financial institutions for the reasons stated below:

- Information can be acquired relatively fast, the interviewees have a lot of experience regarding their business and offshoring. They can tell their experiences which is a lot faster than to experience everything yourself at the company, if this is possible at all. (Verschuren, 1995, p. 135)
- There is a big diversity in the information found since the interviewees are all from different companies (Verschuren, 1995, p. 131)
- Controllability, the person who interviews can easily head for the relevant information (Verschuren, 1995, p. 129)

Yellowtail noticed during ORA1 that people from the business side were sometimes unable to answer some IT related questions properly. Therefore people from the IT side are preferred over people from the business side. During some interviews two people of the organization participated, one from the IT side while the other was from the business side.
The questionnaire which is used for the interview (Appendix D) and its corresponding score calculation sheet (Appendix F) are the designed artifact of this research as described by Hevner (2006). This artifact offers an expert view to assess the offshoring possibilities of the Dutch financial institutions based on the authors discussed in the literature study and Yellowtail's experience. Experience gained by using the current artifact may be used to improve it. Improvements will lead to more accurate assessment results and can include changing the set of questions in the questionnaire or changing a question's assigned point value.

4.2. Selection process

Organizations which participated in this assessment were al Dutch financial institutions. Another important requirement was to get a sample of companies which appropriately represented the sector as a whole. Therefore different kinds of companies have been selected, banks, insurance companies, et cetera. They differ in size, organizational maturity, offshoring strategies, et cetera. Some organizations conducted all their IT work offshore while others did not want to engage in offshoring at all. The companies which participated in the research are stated in table 6.

Company	Type	# Employees	In business since
ABN AMRO	Bank	98,080	1824
ABP	Pension fund	2,389	1922
Achmea	Insurance company	9,000	1811
Aon	Insurance company	46,000	1919
Bank Mendes Gans	Bank	<100	1883
Banque Artesia	Bank	280	1872
Fizier	Life cycle savings adviser	<10	2003
de Goudse Verzekeringen	Insurance company	800	1924
Interpolis	Insurance company	6,000	End 19th century
Obvion	Mortgage lender	220	2004
SNS	Bank	3,300	1817
Undisclosed	Bank	~2,000	~1750

Table 6: Companies participating in assessment interviews

4.3. Questionnaire Design

An organization does not need to have any offshore experience in order to participate, the questionnaire only assesses how successful an organization would be if it moves IT work offshore. It is assumed that an organization which complies more with the theoretical model (figure 13) will achieve more successful offshore results, since this model prescribes how to offshore successfully. Therefore, the questionnaire measures the degree to which the organization complies with the theoretical model. Furthermore it measures the maturity with respect to offshoring, although its influence on the score is small. An organization which has offshoring experience will score slightly higher at ORA2 than an organization which does not have this experience if they comply evenly well with the theoretical model. This is done because both companies may be evenly successful according to the success definition (i.e. meeting the realistic goals stated in advance), but most likely the organization with the experience will achieve better results in terms of profit. This influence on the score is however small, the questionnaire mainly measure the degree to which an organization complies with the theoretical model.

Some other factors of the theoretical model are not applicable, like the contextual factors which deal with the offshore country and the success part which is directed to distinct projects. Therefore no questions relate to these topics.

The five success factors from the theoretical model are used for the categorization of the questions. This is only done in order to make the questionnaire more conveniently arranged. Questions which do belong to another part (for example the preparation and evaluation stage) of the theoretical model are placed at the most appropriate success factor.

Each question either belongs to the readiness or mindset of an organization within these success factors. The same definitions apply to readiness and mindset as during ORA1. These definitions can be found in paragraph 1.1.3 of this report.

Readiness and mindset has nothing to do with the topic which the question addresses. Whether a question belongs to readiness or mindset is purely determined by the question. A question about external services can serve as an example of this. A question which would measure the readiness of external services would be: ”External services have replaced some of our internal services?”, it would be a mindset question if it were put like this: “We truly consider external services as an alternative to internal business services?”. Getting a good balance between readiness and mindset questions for each area was the starting point for determining how each question was posed.

Questions come from different areas within each success factor. Figure 15 shows all the areas which have been taken into account at each success factor during questionnaire design.

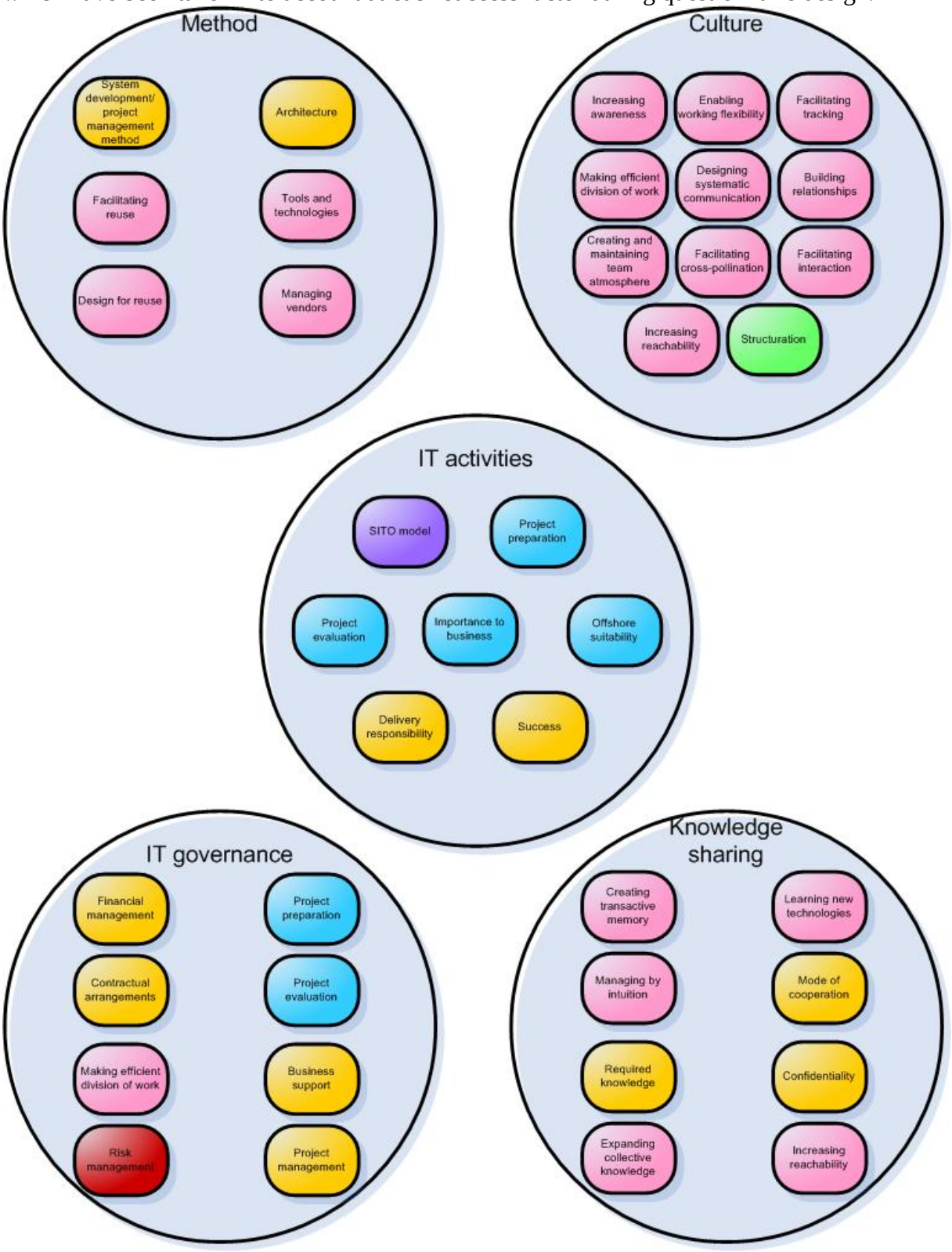


Figure 15: Questionnaire Source

The complete questionnaire can be found in appendix D. Every question stated in the questionnaire is there to cover a specific best practice. The best practice each question covers

can be found in appendix E. This are the same as given in figure 15, with the exception that figure 15 does not show which question covers which best practice.

Different colours have been used in figure 15 to illustrate all the best practices which are taken into account in the questionnaire. Areas which are coloured pink come from Kotlarsky, blue from Willcocks, red from Aron, purple from Carmel, green from Walsham, and yellow coloured areas come from Yellowtail's own offshoring experience. All best pratices, except for those which come from Yellowtail, are already discussed in the literature study. The best practices that come from Yellowtail are explained below:

- *Method → System development/project management method*: Yellowtail knows from her own experience that offshore projects are more successful when it is governed by a system development/project management method. Yellowtail even developed her own method for offshore cooperation (Yellowtail, 2006).
- *Method → Architecture*: A clearly defined architecture will contribute to offshore success since it will make the organization's whole IT part more understandable. The importance of architecture is widely acknowledge by professionals and there is even a national contest about IT in The Netherlands (NK ICT Architectuur, 2006)
- *Activities → Delivery responsibility*: Most organizations are a bit anxious to outsource delivery responsibility. They are better prepared for outsourcing and offshoring when they dare to transfer the final responsibility to the supplier.
- *Activities → Success*: This is about the success rate the company is currently achieving in all its IT projects. Organizations which are highly successful with offshore projects will in general be less willing to move it offshore.
- *IT Governance → Financial management*: There is a relation between the amount of attention which is paid to cost savings and the likelihood of offshoring. Offshoring will be considered earlier when achieving cost savings is a major goal.
- *IT Governance → Contractual arrangements*: Organizations that are well aware of the importance and limitations of contracts will in general be more successful in setting up an offshore project.
- *IT Governance → Business support*: Some applications are clearly supported by the business while others do not. Major decisions regarding the former type of applications will be easier made and more effort will be put in making these decisions successful. That is why business support will be beneficial to offshoring.
- *IT Governance → Project management*: Good project management will contribute to the success of each project, especially offshore project since more management is in general required.
- *Knowledge sharing → Required knowledge*: It would be harder to engage in offshore projects when business requires more knowledge.
- *Knowledge sharing → Mode of cooperation*: Organizations differ in their view regarding cooperating, some can only work efficiently if the whole team is together at the same place while others can also work efficiently when team members are situated at different locations. The latter attitude will be beneficial to offshoring.
- *Knowledge sharing → Confidentiality*: Confidential knowledge will be hard to share across locations because there will always be security issues. This will hamper offshoring, especially given the fact that most popular offshore countries are not renowned for their integrity.

21 Of the 22 best practices identified by Kotlarsky are covered by at least one question. The best practice that is not treated is irrelevant with respect to this research. This is the *Investing in 'advanced technology'* best practice from the components management success factor.

Two times (*Making efficient division of work* at IT Governance and *Increasing reachability* at Knowledge sharing) a best practice from Kotlarsky pops up at another success factor from

ORA2 than which is was mapped upon (figure 14). This is simply done because three questions (closed questions 7 and 16 from IT governance and closed question 11 from Knowledge sharing) related to those best practices were more appropriate to another success factor in ORA2. Other questions deal with the project preparation and evaluation stage. These questions are derived from the first four and last building block from Willcocks respectively.
The answers at the closed question determine the final score as it is attained by the financial service provider. Appendix F contains the score sheet and explains exactly how the score is calculated. All questions which are taken over from ORA1 have the same point distribution in ORA2 as in ORA1 in order to keep maximum comparability. Most questions which have been added relate to Kotlarsky or Willcocks and have the same distribution of points so no distinction of importance is made. The distribution that was chosen for the new questions is the one which was mostly used in the questions copied from ORA1.
All the closed question contain an even number of answers, this is done on purpose because it forces the respondent to get off the fence (College of Computers, 2006) and he (all interviewees were male) cannot suffice by picking the neutral option.
The answering possibilities used in ORA2 are slightly changed from their counterparts in ORA1. Both researches had four answering possibilities, only their names differed. In ORA1 the answers were: 1: completely disagree, 2: disagree, 3: agree and 4: completely disagree. It seemed that a lot of people were in trouble distinguishing between completely disagree and disagree and between agree and completely agree. It was supposed that people tended to pick agree or disagree when they actually meant totally agree or totally disagree respectively. The answering possibilities have been chanced to overcome this deficiency. The answers which have been used during ORA2 were: 1: disagree, 2: more disagree than agree, 3: more agree than disagree and 4: agree. Table 7 shows how the answers were divided for the questions which were in both ORA1 and ORA2. Answers 1 and 4 were obviously more chosen in ORA2. The reason behind these changes is unclear, it might well be the different answering possibilities but it could also be for another reason.

	Answer 1	**Answer 2**	**Answer 3**	**Answer 4**
ORA1	21%	26%	30%	23%
ORA2	26%	15%	25%	33%

Table 7: Division of answers in ORA1 (2004) and ORA2 (2006)

4.4. Result reliability

One might argue that the score of an individual company is largely influenced by personal characteristics and mood of the interviewee and this will lead to unreliable results. The former is completely true, it is even one reason why each individual score is not linked with the company (The other reason is confidentiality, companies do not want their score to be disclosed although it might be unreliable). Some more explanation is needed for the latter. The assessment serves two objectives:

- How well are the Dutch financial institutions prepared for offshoring in terms of readiness and mindset?
- What is the difference in readiness and mindset at Dutch financial institutions regarding offshoring between 2004 and 2006?

It can be seen that the goal is not to measure the individual scores, but to find the market average. Therefore different interviews are carried out at different companies to get a good view of the market and differences due to personal characteristics of the interviewees will cancel out each other.
Just like during ORA1, a final note regarding these areas is appropriate here. The areas and their corresponding recommendations have a predictive character and do definitely not claim to have deterministic power. Some reasons make the results less reliable: the personal

characteristics of the interviewee, the fact that it is based on a model which inherently losses some parts of reality and the borders in the matrix (a company which scores 32 percent on readiness and 66 percent at mindset is situated in the "Do not offshore" area while it would be in the "Offshore Ready" area if it got two percents more at both dimensions).

4.5. Results ORA2

This paragraph will present the results from the twelve assessment interviews. The most interesting findings will be discussed first at each success, separated by readiness and mindset practices. *Mindset practices* is used as title because some practices stem from the organization's mindset but are operationalized in practices. The readiness and mindset matrices can be found in appendix G. The overall results will be given after that.

4.5.1. Method

Readiness: More than half of the companies have a well defined architecture which describes application, information, and infrastructure standards. Almost all of these companies also enforce the use of this architecture which gives them a solid basis when it comes to system design. About the same number of companies have project managers who are uniformly certified in the same project management techniques.
The ICT infrastructure is working fine at 75 percent of the companies and 67 percent indicates that all stages in the system development process are supported by appropriate tooling. This suggests that most of the organizations do not have to worry about the appropriate tools and technologies success factor from Kotlarsky. Their score on this area seems to be sufficient. On the other hand, just a few organizations use relative new collaborative technologies, just two organizations use msn messenger or another chat program, one organization deploys skype, and four use videoconferencing. Improvements may be needed here if they start engaging in offshore projects.

Mindset practices: The interviewees, who are all in the top of the IT organization, all recognize the positive contribution that project management and system development methods have to the project success. However, the opinion about the need for a project management or system development method largely differs at the Dutch financial institutions. Nevertheless some organizations solely rely on their people instead of the method, others completely rely on the method because it ensures project success in their opinion. In general bigger organizations do rely on a method more often than smaller organization. 42 Percent of the organizations use a method which does not support communication between dispersed teams. This can become a problem if the organization wants to shift to offshore projects.
Two other best practices from Kotlarsky, managing vendors, and designing for reuse, are not widely adopted by the Dutch financial institutions. Designing for reuse is taken as requirement at half of the companies while 42 percent manages its suppliers.

4.5.2. Culture

Readiness: Almost all communication in the international IT business is done in English. Therefore employees need to be able to express themselves clearly in this language. This does not seem to yield a lot of problems at most of the organizations, 67 percent indicates that their employees master English.
A track and trace system keeps track of all issues and provide easy means to find each issue. Such a system contributes to working efficiency, especially if people work on different locations in different time zones and are not readily available for each other. A track and trace system is used at 75 percent of the organizations.

Different cultures have different ways of communication. Clear communication guidelines can prevent communication becoming a constant nuisance. Good communication guidelines comprise at least style, content, and frequency (Kotlarsky, 2005, p290). Guidelines like that are implemented at 42 percent of the organizations.

Mindset practices: The interviewees have different objections against offshoring. The 'Not Invented Here' syndrome (Katz, 1982) is most expressed. This means that people tend to object for no particular reason to using something which is made or invented by another organization. Other objections which were stated a lot were: the fact that nobody believes that anyone else can do it better and the loss of control which comes with offshoring. International awareness is most mentioned as a beneficial part of the culture with respect to offshoring.
Requirements change after the requirements design stage because of end user involvement at 83 percent of the companies. This process can go quite smoothly if the end user and developer are located in the same building and meet each other regularly. It becomes really hard to manage if the end user and developers are situated at different places. All the changes in requirements should be formalized if this happens in an offshore project in order to prevent misinterpretations of the new requirements. This cultural aspect has the potential to become a major problem when offshoring IT, given the fact that this culture is noticeable at almost all companies. It was also a major source of frustration of most interviewees.
Kotlarsky emphasizes the need of being aware of each others' activities. Employees at 92 percent of the organizations are aware of each others' activities. This is partly due to the fact that all the companies explicitly take care of face to face meetings. Regular personal contact contributes to project success according to 92 percent of the organizations. 83 Percent of the companies put a lot of effort in creating and maintaining a good team atmosphere.
Kotlarsky states that detail planning should be left to the employees themselves and employees must be willing to work flexible hours in order to achieve project success. The Dutch financial institutions comply reasonably well with this proposition, detail planning is left to the employees in all organizations and 83 percent of the organizations have flexible employees.

4.5.3. IT activities

Readiness: Some companies already have experience with large offshore projects, one organization conducted over 20 of these projects, one between 6 and 20, two organizations did between one and five of these projects, and the remaining eight organizations did not conduct any. Organizations which conducted offshore projects can readily apply this experience and probably attain better financial results at future offshore projects.
Most of the organizations have a lot of relatively small applications that each serves a particular goal. It is not uncommon for big organization to have over 100 applications. 50 Percent indicates that a large part of their applications are legacy systems, 50 percent has applications which are not well documented and another 67 percent has applications which are not modular build. These three factors, accompanied by the fact that most applications do their job reasonably well, will make a company think twice before offshoring the development to such an application.
The concern whether a project will finish successfully can be left to the supplier by outsourcing the delivery responsibility. However, most organizations decided not to outsource the delivery responsibility, no matter if it involves custom made software, software maintenance, tests activities or another activity. This may not be done because it will cost money and most of the projects finish successfully at the moment. 75 Percent of organizations state that more than 75 percent of all IT projects are successful while this figure is between 50 and 75 percent at the other organizations that took part.

Mindset practices: Custom made software, software maintenance and IT helpdesk activities are all considered to be of strategic importance by more than half of the organization, most companies classify software maintenance activities as strategic important. This may turn out to be an objection to offshoring since an organization is rarely well served by a supplier which performs these functions (Willcocks, 2005, p. 109-111). Furthermore, improvements in quality seldom appear to be a reason for outsourcing, just two organizations do outsource with this being the main reason. On the other hand, software development, support and helpdesk services are all suitable for outsourcing according to Willcocks' service outsource suitability matrix (table 4). These kinds of activities are pretty similar to custom made software, software maintenance and IT helpdesk activities respectively.
The Dutch financial service providers are planning to outsource delivery perform more often in the coming two years, this figure is still low as discussed earlier. Organizations are planning to improve this figure slowly for all IT activities.

4.5.4. IT governance

Readiness: Organization do all determine their IT budget in a different way but almost all have in common that the business decides about it. There were two organizations where the business did not take this decision. The budget is determined in an annual cycle at most of the companies but some use a shorter horizon.
Most outsourcing and offshoring is guided by SLAs, 75 percent uses this kind of agreements at the moment. SLAs are less used when it comes to cooperating with other parts of the organizations. 42 Percent uses SLAs internally. Organizations do also monitor to which extend the SLA is met.
83 Percent conducts a formal risk analysis before each major project and most of them keep managing the risks throughout the projects. This high figure suggests that it is too dangerous for most of the organizations to just start a major project based on good feeling.

Mindset practices: Some organizations have a clear vision which determines which activities will be outsourced and offshored, others use an incident driven approach while there are also organizations which do not outsource in the first place. Cost and knowledge seem to be the most important parameters whenever a vision is used.
Offshoring IT activities is one of the top priorities at the board of directors in 33 percent of financial institutions. The other organizations do not bother about it too much at the highest level, in spite of all the attention offshoring received lately.
25 Percent of the participating organizations indicate that decreasing business costs is not the most important job of the IT department, this probably sets some limits for offshoring since this is still mainly done for costs reasons.(Willcocks, 2005, p8).
Most organizations do not conduct high potential projects which also come with severe risk, in spite of the fact that most of the companies carry out a formal risk analysis. 33 Percent indicates that sometimes projects like this are conducted.
It turned out that most of the companies set realistic goals before projects were started. All the organizations which did engage in offshoring projects completely agreed with the learning factor which was assumed. This was the only question of the assessment interviews to which all the companies answered exactly the same.

4.5.5. Knowledge sharing

Knowledge sharing is a new success factor in this research and is a relative new topic in management as well (Wijnhoven, 1999). The organizations which participated in this research

scored very different. Some organizations performed really well while other performed really poor. There was only one organization in the middle block of the matrix (Appendix G).

Readiness: Just more than half of the organizations do not have a Knowledge Management System (KMS). Some of the KMS are neither readily available nor heavily used. This makes the actual number of organizations which effectively deploy a KMS even lower.
A lot of knowledge is required in 58 percent of the organizations which could be a problem if all knowledge needs to be transferred to an offshore supplier. Only two out of the twelve organizations had confidential knowledge while 42 percent would not disclose their infrastructure to a third party. All these things can be an obstacle to offshoring.

Mindset practices: Employees are stimulated to gain knowledge at 33 percent of all companies. This is achieved by offering courses or workshops. Furthermore, employees do learn a lot from each other. They mutually exchange a lot of knowledge at 83 percent of the organizations. Most of the organizations do not have a proper transactive memory, 42 percent of the interviewees indicate that people do not know whom to consult if they have a problem.
Almost all the manager 'manage by intuition', there was just one organization where this was not done. Some other knowledge related issues were identified which could possibly hamper offshoring. Almost half of the organizations think that effective cooperation is only possible when the whole team is together in one place.

4.5.6. Overall assessment interview results

The matrix with the average score and the results for each individual company can be found in figure 17. The average readiness and mindset during ORA2 were 49 and 52 percent respectively. This meant that the 'average company' would be situated in the offshore potential area. A detailed explanation of each area can be found in appendix B. Two companies from the twelve which participated are placed in the offshore ready area, eight in the offshore potential area and two in the do not offshore area. No companies are in the offshore unlikely area.
The borders which separate the advices and the advices itself may be changed later on if it appears that they do not hold in practice. This is currently impossible because too little offshoring experience is gained by Dutch financial institutions.
These results give a quite optimistic view regarding the offshore potential of most Dutch financial service providers. Most companies are in the offshore potential area which means they are fairly ready for offshoring. On the other hand it can take some time before most organizations are moving their IT work offshore, given the fact that most companies are not eager to conduct projects which encompass many risks but have a lot of potential too. These characteristics pertain to almost all offshore projects.

4.6. Comparisons of results ORA1 and ORA2

The results of ORA2 will be compared to the results from ORA1 in order to see the difference in two years time. ORA1 and ORA2 shared a fair amount of questions. Table 8 shows the number of questions in ORA1 and ORA2 and which questions were the same.

	# Closed questions	**# Open questions**	**Total**
ORA1	83	8	91
ORA2	108	10	118
# Same questions	72	8	80

Table 8: Number of questions in ORA1 (2004) and ORA2 (2006)

Only questions which were in both ORA1 and ORA2 will be considered in this analysis (i.e. the 72 same closed questions and the eight same open questions), except for the overall analysis (paragraph 4.6.5) which compares the overall scores of both researches.
The differences at each individual success factor will be discussed first, the overall results will be treated after that. There is no paragraph dedicated to the difference at the knowledge sharing success factor because this one is introduced in ORA2. The readiness and mindset matrices for each success factor of ORA1 can be found in appendix C, appendix G shows them for ORA2.

4.6.1. Differences method

This was the only success factor on which the average score was below the score of ORA1. Especially fewer points were scored on the readiness questions.

Readiness: The Dutch financial institutions score worse on the architecture related questions. Interviewees do less often agree with proposition that they have a clearly defined architecture which describes the principles and standards for applications, information and infrastructure. During ORA1 they were also more positive about the documentation of this architecture and how well relationships between applications and company processes were prescribed by the architecture. Furthermore project managers in an organization are less often certified in the same project management or system development methods.

Mindset practices: More organizations are using automated tools for the testing stage. Some kinds of testing work can be taken over from humans by computers. Examples include performance and regression testing. It only takes once to write the test scenarios which can easily be used over and over again by the testing program.
The whole IT organization (Systems, infrastructure and maintenance organization) is better prepared to support fast changes in functional, capacity or service requirements. An organization which is able to efficiently handle changes would probably cooperate more successful with an offshore supplier. Most of them tend to behave far less predictable then an onshore supplier, especially if the offshore supplier's process is not certified.

4.6.2. Differences culture

Readiness: Organizations have made improvements concerning the use of English in the last two years. More user specifications are written in English and more English documents are used throughout the organization. The adoption of English by the whole organization and the IT department in particular will be beneficial to the successful deployment of offshoring.

Mindset practices: Dutch financial institutions are increasingly implementing standard software applications without committing changes, which is expensive in general. Implementing standard applications and services can eventually lead to a new structure in the software sector where software as service is the important paradigm. Offshoring is common in this paradigm (van Hillegersberg, 2006).
Organizations cooperate less with their clients and suppliers when an inter-organizational solution is implemented. The reason for this decrease in cooperation is unknown but it will hamper a successful offshoring relation because especially these relationships require good cooperation.

4.6.3. Differences IT activities

The differences between ORA1 and ORA2 became most apparent at this success factor. At some question the average difference was even a whole answering possibility (if people would

on average take the second answer at ORA1, they would pick the third in ORA2, or the other way around). A figure which was never seen at the other three success factors.

Readiness: The relation between business processes and applications is starting to become clear whereas this relation was rather fuzzy two years ago. Applications often crossed functional borders at that time.
Organizations are outsourcing delivery responsibility more often for all kinds of software activities. This happens however a lot slower than expected. Two years ago companies expected to have outsourced more delivery responsibility in two years time than they are expecting right now to have outsourced in two years, see figure 16.

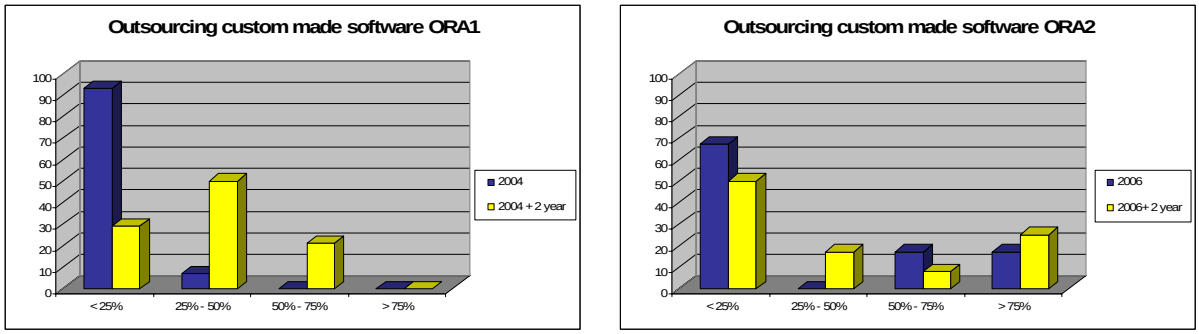


Figure 16: Outsourcing of custom made software in ORA1 and ORA2

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More IT projects are completed successfully. In ORA1, two companies indicated that the success rate was below 25 percent six companies completed between 50 and 75 percent of their projects successfully and more than 75 percent of the projects succeeded at the other six companies. In ORA2 three companies indicated to finish between 50 and 75 percent of their projects successfully, the other nine completed over 75 percent of their projects successfully.

Mindset practices: Companies are increasingly classifying their IT activities as strategic important. This can be an objection to offshoring since it is in general not done to offshore strategic important activities.
Better quality is seldom stated as the main reason for offshoring, even fewer times than during ORA1. Some interviewees who did not engage in offshoring were obviously afraid of it because they had heard too much disastrous stories about it. It is unclear if offshore suppliers deliver poorer quality in general or if a mind shift of the Dutch financial explains this decrease.

4.6.4. Differences IT governance

Readiness: the interviewees indicated during the interviews that SLAs are not that much used as means of cooperation between internal business departments. SLAs were more often internally used two years ago. Written contracts formalize the arrangements. Working by means of formal arrangements will be beneficial to an offshoring relationship since informal arrangements more often suffer from errors in communication between dispersed teams.
The relation between applications and their corresponding owners and sponsors from the business is more obvious compared to ORA1. It seems like improvements regarding the relation between IT and business have been made during the last two years since companies also identified a stronger relation between applications and business processes.

Mindset practices: Purchasing decisions are increasingly driven by the Total Cost of Ownership (TCO). Organizations take this figure in account and try to minimize it instead of other indicators like the initial price. TCO represents an excellent means to improve supplier

selection and evaluation (Ellram, 1995). Companies can obviously better select the appropriate offshore supplier if they possess better selection tools.
Organizations are less eager to carry out projects that come with high risk but potential high return as well. This is quite strange since there is a lot of competition between financial institutions and especially these kinds of projects can give companies an edge over competitors. Probably the fear to fail is preferred over the possibility to outstand.
Organizations are aligning their IT budgets to their business strategy. The budget is increased if business decides to expand and decreased if the business is scheduling to take it easier. This alignment was less visible two years ago.

4.6.5. Overall differences assessment interviews

The results of ORA2 are quite similar to the results of ORA1. The average readiness was 49 percent and the mindset 52 percent. This is slightly higher than the 48 percent readiness and mindset during the first ORA. The high expectations which were stated two years ago were not observed. It is assumed that the expected increase in score did not actually occur based on the results of the assessment interviews. Table 9 shows the scores on all success factors in both researches. Appendix F clearly explains how the score is calculated.

	Readiness – ORA1	**Mindset – ORA1**	**Readiness – ORA2**	**Mindset – ORA2**
Method	62%	51%	49%	54%
Culture	39%	42%	48%	63%
IT activities	38%	51%	42%	34%
IT governance	56%	48%	62%	48%
Knowledge sharing	N/A	N/A	42%	62%
Overall	48%	48%	49%	52%

Table 9: Scores ORA1 (2004) and ORA2 (2006)

Significant changes can be seen at three success factors. Together they level off so the average readiness and mindset scores of ORA1 and ORA2 are pretty similar. The important differences are:

- *Method readiness:* It is unclear why companies score worse at method readiness. At least it is not due to the questions which were introduced because they also scored worse at the questions which were in both ORA1 and ORA2. No explanation will be given for this decrease in score since this research only assesses the differences and does not look for explanations unless they clearly appear from the answers.
- *Culture mindset and readiness:* Improvements have been made at the culture success factor. Culture was the lowest scoring success factor in ORA1 but scores were pretty decent in ORA2. The fact that especially the culture success factor made improvements can be important to future offshoring developments. Culture is arguably the factor which leads to most of offshoring's failures (Molenaar, 2005).
- *IT Activities mindset:* Activities have taken over the dubious honour of being the lowest scoring success factor. There has been a sharp decline in the mindset related to IT activities. This mostly may come from the changing expectation with respect to outsourcing delivery responsibility. Most companies are expecting to outsource this responsibility a lot slower than two years ago, as discussed earlier.

The overall readiness mindset matrix of ORA1 and ORA2 are shown in figure 17. The matrices for each success factor can be found in appendix G. The companies are divided over a larger area in the matrix. This can mean that organizations are starting to have a clear vision towards offshoring, something which also appeared during the assessment interviews. Some

companies decided to engage in offshoring and conduct almost all projects offshore. These companies perform well on average. Other companies have decided not to use offshoring and they perform worse in this assessment.

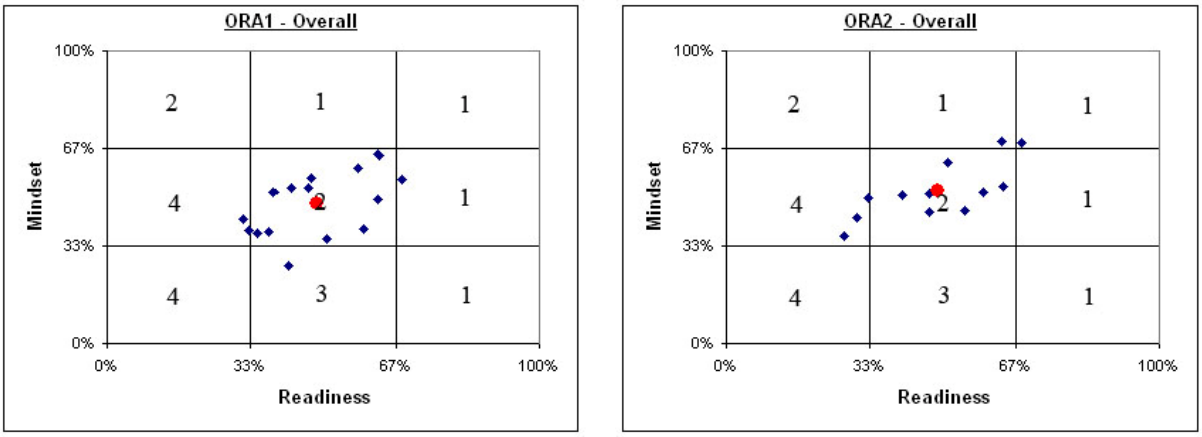


Figure 17: Matrices ORA1 (2004) and ORA2 (2006)

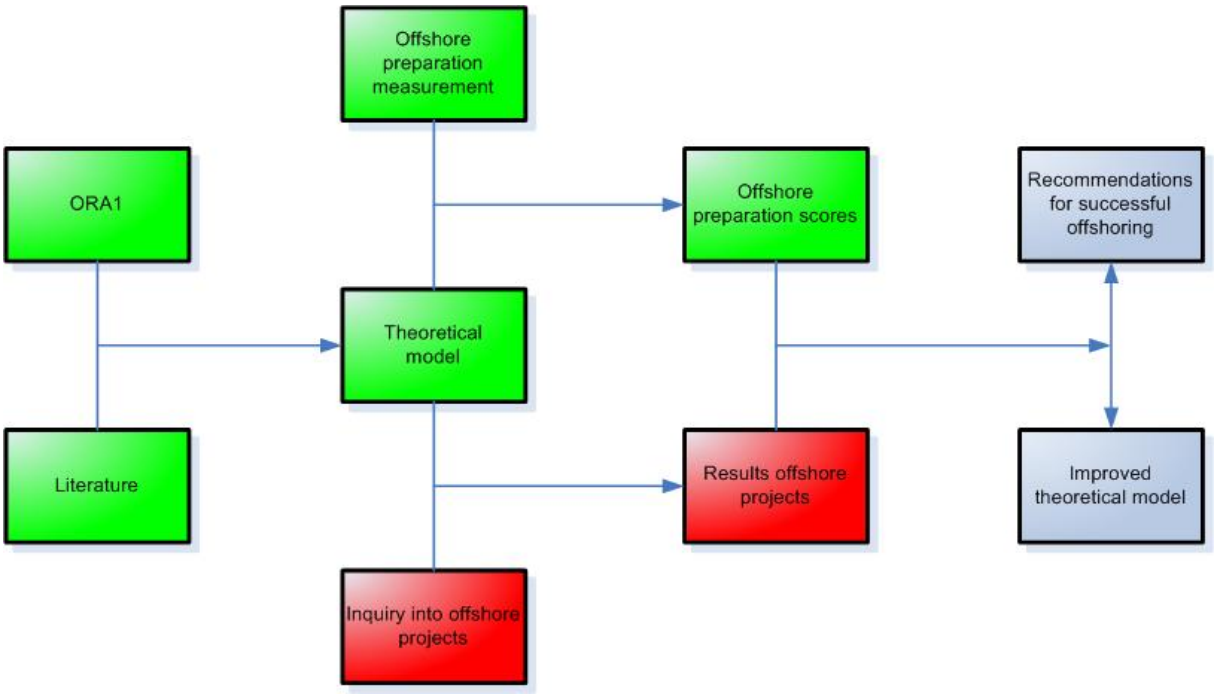
4.7. Conclusions

This chapter answered the second and third research question, *How well are Dutch financial institutions prepared for offshoring in terms of readiness and mindset* and *What is the difference in readiness and mindset at Dutch financial institutions between 2004 and 2006*. The assessment interviews showed that the Dutch financial institutions are fairly ready for offshoring. Eight of the twelve participating companies have the potential to offshore successfully and two are ready for offshoring. The second research question is answered hereby.

Before this research it was expected that the Dutch financial institutions would be a lot better prepared for offshoring. This research showed that the readiness and mindset was about the same as two years ago. The readiness increased from 48 percent to 49 percent and the mindset increased from 48 percent in 2004 to 52 percent in 2006. Therefore there is no reason to believe in the correctness of this expectation based on the results from the assessment interviews. However, some changes have been taken place at individual success factors. These changes are not tried to be explained since that is not the nature of an assessment. The following changes have been taken place:

- Method readiness decreased from 62 percent to 49 percent.
- Culture mindset increased from 42 percent to 63 percent and culture readiness from 39 percent to 48 percent.
- IT activities mindset decreased from 51 percent to 34 percent.

Chapter five: Case studies Offshore Readiness Assessment II



The case studies provide a qualitative addition to the rather quantitative approach used in the previous chapter. Some actual offshore projects were investigated to gain hands-on experience. The most interesting findings from the case studies will be used to offer guidelines and thereby help to answer the fourth research question *Which lessons can be learned from previously conducted offshore projects and the current situation at Dutch financial institutions?*

5. Case studies Offshore Readiness Assessment II

Case studies are getting more used in Management Information Systems (MIS) research over the years (Palvia, 2003). The hierarchical method will be used for the case studies (Verschuren, 1995, p. 172). This means that multiple cases will be treated as if it were all isolated cases. Separate cases will be considered as independent as possible, although a fixed approach will be used during the analysis. A fixed approach will help to compare the cases in the second stage, in which the results from the first stage will be used as input for the comparative analysis across the cases. A fixed questionnaire with open questions will be used to study the cases. An interview is held with a representative of the company to acquire answers to all questions in the questionnaire. Differences and similarities across the cases are tried to be found, possibly a higher abstraction level will be used in order to put multiple aspects together.

5.1. Selection process

A case must meet all the constraints before it is even considered to be treated, that means it must concern an IT project which is executed for a Dutch financial institutions. Furthermore cases must be different from each other in order to be better able to find similarities which apply to all cases which meet the constraints. Cases can be different with respect to the offshore country, success, size of the project, type of project, et cetera.

5.2. Questionnaire design

The questionnaire which is used for the case studies is completely derived from the theoretical model. Each part is covered since the theoretical model exactly matches the case studies, both describe an offshore IT project. The questionnaire consists of 71 open questions and four closed questions. Almost all questions are open so the interviewees can tell the most interesting things and are not bounded by the format of the answering possibilities. The questionnaire can be found in appendix H.
Yellowtail's experiences with respect to offshoring were also taken into account during the questionnaire design. The employees from Yellowtail have a lot of offshoring experience from the cooperation with their development centre in Cape Town and other offshore projects in which they participated as consultants or projects managers.

5.3. Case studies

Three case studies were conducted. Each case is studied by one interview with a manager of the project. All interviews were held at the onshore side. The details of each case can be found below. First a brief general description of the cases is given, subsequently the findings are grouped based on the theoretical model. Readiness and mindset practices are addressed separately for all areas which belong to the process part of the theoretical model, just like it was done in the previous chapter.
The names of participating companies and involved projects will not be disclosed for confidentiality reasons, instead the project will be described. The complete questionnaire was discussed during all case studies although sometimes the conversation clearly moved away from the questionnaire because interesting things appeared which were not in detail covered by the questionnaire itself.

5.3.1. Mortgages mid and back office system

General
This offshore project concerns the development of a mid and back office system for mortgages. This project is carried out by a Dutch IT supplier which offshored most of the work to India. About 160 employees are working on the project in India and between 10 and 15 in The Netherlands.
The project is conducted offshore because it could be done cheaper over there, these expected cost savings do actually occur so far, since the project is still running at the time the case study was carried out. The interviewee did not want to consider this as a successful project, despite the attained cost savings. A lot of problems were encountered throughout the project. It appeared to be hard to manage the offshore side, there were a lot of problems due to language and communication.

Context
India has a culture rather different from the Dutch one, as can be seen in figure 5 in the first chapter. These differences in culture often lead to severe problem. Some legal problems were encountered in the project, due to the fact that it was sometimes hard for an Indian employee to acquire a visa. In India it is 3.5 or 4.5 hours later (depending on daylight saving time). This was an advantage in this project, the Indian people stayed at the office until the Dutch employees left for home. In practice this meant that the Indian employees worked more than agreed upon.

Process → Offshore project preparation
Readiness: The company realized that it is better to set targets in advance. Therefore the targets were explicitly set in advance, although they failed to comply with reality. They were overambitious, especially with regard to the pass through time. Therefore the project could not meet the deadlines which were set. Furthermore, the employees were hardly informed about the offshore supplier in advance.
Mindset practices:
Throughout the project, it appeared that face to face meetings were beneficial to project outcomes. Consequently, more attention was paid to face to face communication later on. Eventually it was decided to appoint a Dutch manager who remained in India all the time to serve as a contact person. All these problems can be related to ill-defined impressions in the minds of the people who prepared the project. Probably a lot of problems would be prevented if they had a better impression about offshoring and its implications.

Process → Method
Readiness: The iterative method RUP is used for system development. The method is strictly applied but not modified to offshore work. The documentation was subject to policies regarding language and the amount of required documentation. Documents are often delivered in Dutch by the customers and needed to be translated to English. The project contained a Change Management Board which assured efficient management of issues.
Mindset practices: The documentation level was appropriate, this was also a directive of the project management. The Indian offshore supplier was CMM level 5 certified which made the process in The Netherlands more formal as well. This was well received by the Dutch employees. Working by means of a standard system development method contributes to success according to the onshore employees.

Process → Culture
Readiness: The main problems during this case concerned the difference in language and culture, this was also seen as the biggest risk in advance. People at the on and offshore side have a lot of problems understanding each other. This is partly due to differences in English accent. Furthermore the communication styles differ a lot. Dutch are quite frank with other people while Indians tend to be more reserved and often do not tell their true opinion, especially when they do not agree.
The offshore supplier enjoyed the confidence of the onshore party. Young Indian employees are working offshore, they have fine technical skills but experience is lacking. They are paid well and good performance is financially rewarded.
Mindset practices: The Indian people managed to adapt a bit to the Dutch way of communicating, on the other hand the Dutch employees failed to adapt to the Indian style. The interviewee indicated to be disappointed in working with another culture after all.

Process → IT activities
Readiness: This was a complex project, it was big, integrated with a lot of other systems and a lot of parties were involved. The risks were partly mitigated because the offshore supplier was responsible for all his activities. This encompassed the development and parts of the testing work.
Mindset practices: The interviewee indicated that this project would be suitable for offshoring despite its complexity and the strategic importance of the project to the client. According to the interviewee it does not matter whether a project concerns new developments or adaptations to existing systems. Both type of projects are equally well suited to conduct offshore.

Process → IT governance
Readiness Sometimes legal issues emerged, for example when an Indian employee could not get a visa for The Netherlands. A Service Level Agreements (SLA) was used to settle the contractual responsibilities. The SLA included response time in case new issues were found and served well.
Mindset practices: The Dutch IT supplier decided to conduct most of its IT operations offshore, this has been a strategic decision. The offshore supplier contracted in this project is a strategic partner. Therefore they were not selected for this project, all the projects are carried out by them.
The budget is determined based on a projection of the costs. A project can only be conducted offshore if its size exceeds a certain lower limit, according to the interviewee. There is no upper limit for the size of the project in order to be carried out offshore.

Process → Knowledge sharing
Readiness: A lot of business knowledge was involved in this project. The offshore party knew nothing about mortgages or the relevant Dutch law. They gained proficient knowledge by talking to the onshore party.
Mindset practices: Business knowledge kept being a problem sometimes although the offshore party must be acquainted with it after some time. The project was not equipped with a Knowledge Management System. Business knowledge was not a critical success factor to the project, it only led to some delays in case more business knowledge needed to be transferred to the offshore supplier.

Process → Offshore project evaluation
Readiness: Some evaluation has been done by the interviewee although the project is still running. A lot of problems have been encountered throughout the project, mostly related to the cultural differences.
Mindset practices: The cultural differences were clearly underestimated before the start of the project. This is the main lesson which will be derived from this project. Next time more attention will be paid to overcoming these differences.

Success
The interviewee considered this project as unsuccessful because a lot of problems were encountered. Actually this is quite strange since the projected cost savings did place. The project is therefore successful according to the theoretical model. Probably even bigger costs savings can be made in future projects when the lessons from the project evaluation have been applied.

5.3.2. Interest Calculation System

General
The project concerns the development of a system which could calculate interest figures for certain financial products. A system from the seventies or eighties is currently used for this purpose and a lot of things need to be done by hand since it is not supported by the system. The new system needed to replace this old system and the handwork. The IT department determined that at least two third, preferably three quarters, of each project must be conducted offshore by the Indian supplier. All IT work in this organization is done offshore by a limited number of preferred suppliers. It is only possible to make an exception to this rule when it is impossible to conduct the work offshore, for example when a packet configuration is concerned.

Context
The development work was done by the offshore supplier. One third of the offshore project joined the organization onshore to work on the project and take care of the communication with the offshore side. This way the organization itself was not bothered by the communication offshore and all problems which usually come with it.
This setup did resolve the time difference issue and mitigated the cultural differences. All the communication between the organization and its offshore supplier happens at the onshore location. A lot can be done face to face which greatly increases efficiency. Still problems occurred because the Indian people refrained from saying no. Furthermore the organization's own people were not that good in communicating themselves.
Some legal problems were encountered. It is forbidden to transfer personal data of clients to India. The organization needed to make a non-personalized database which the offshore supplier could use to test the application.

Process → Offshore project preparation
Readiness: Realistic goals were set in advance according to the interviewee. The project is done offshore because it can be done cheaper. Nevertheless the projected cost savings were not attained.
Mindset practices: The organization arranged a culture workshop for all its employees. This was not sufficient to prevent cultural problems from occurring. Those cultural differences were underestimated and more attention needed to be paid to these differences. Especially in which way professional cooperation is taking place.

Process → Method
Readiness: DSDM is used in a linear fashion and adapted to offshoring. This method is strictly applied and contributes to project success. The organization tried to provide a complete functional design before the development stage starts, although this may not be the proper way in which DSDM is used to be applied. The organization did not manage to devise a complete sound functional design which resulted in a lot of problems later on. This still needed to be learned by this department. Work is done in predefined increments, each increments adds more functionality.
The test work was done by another Indian offshore supplier. The interviewee foresaw major problems here because only 73 hours were scheduled to transfer business knowledge to this test party while 800 hours were used to get the development party acquainted.
The organization paid a lot of attention to the documentation. It is governed by strict policies regarding style and content. A lot of templates are available which exactly describe how to document.
Mindset practices: The organization has a formal cultural which is beneficial to the project, especially with a supplier like this one that is CMM level 5 certified. During this cooperation the organization was enforced to work in an even more standardized way in order to adapt to the supplier's process. This contributed to the success of the project although the interviewee could not tell the supplier was CMM level 5 certified based on the work they delivered.

Process → Culture
Readiness: Some problems occurred because of the differences in English accent between the Dutch and Indian employees. The cooperation with the Indian offshore supplier is going quite well in general, the organization also cooperated in more projects with this supplier. The interviewee indicated that he had expected more problems in advance.
Mindset practices: No explicit attention was paid to face to face meetings, although both cultures met a lot because of the setup of the project. The Indian employees and offshore employees went skiing in other projects with the same supplier and this informal contact certainly contributed to more efficient communication. From this they know the importance of informal communication but for some reason it was forgotten to arrange such a kind of informal contact in this project.

Process → IT activities
Readiness: The structure of the project is rather devious. The main offshore supplier does the development work, another Indian supplier takes care of the testing and there is an American company which is responsible for operational matters. Different parts of these companies are intertwined in the project structure.
Mindset practices: The complexity of the project can become a problem in the future. The organization is working in an incremental fashion and the current increment is of average complexity. Still more difficult increments need to be developed and problems related to this complexity may well appear. Thus the interviewee is definitely aware of the problems which could arise when complex projects are executed by an offshore supplier. Fewer actors need to be involved in future offshore arrangement according to the interviewee because it also contributes to this complexity.

Process → IT governance
Readiness: A fixed price contract was used in the offshore agreement. This seemed a good choice because of the clarity it offered. Sometimes people are more busy figuring out how to bill as much additional hours as possible instead of working on the project whenever a variable contract is agreed upon. The price of the contract was determined after an RFP

process where different suppliers estimated the project cost. This estimate of the chosen supplier was verified by the organization.
Mindset practices: This organization has its own view concerning the size of an offshore project. Each project is carried out in increments or cycles. Each cycle is supposed to last about three months and must contain between three and five man-years of work. The current cycle take a bit too long and needed to be decreased. This requirement is enforced by the general IT department and they are serious about it, it is used as a KPI to assess the performance of the project management.

Process → Knowledge sharing
Readiness: There was no KMS in this project but knowledge is transferred to the offshore supplier by means of documentation and formalized processes. Playback is used after the knowledge transfer, this means that employees of the offshore supplier need to host a presentation in which they tell what they have learned. If they cannot recall the knowledge properly, it is taught again.
Mindset practices: A lack of business knowledge was identified as the biggest risk before the project started and it also turned out to become the major problem. A lot of reviews by employees of the onshore organization were necessary during each iteration. The technical knowledge (i.e. the knowledge which is specific to the IT in the project like COBOL or Unix knowledge) of the offshore supplier was no problem at all. In general this financial institution is well aware of the problems which can come with business knowledge. All their projects are executed offshore and almost all require specific business knowledge which no offshore supplier possesses.

Process → Offshore project evaluation
Readiness: The offshore evaluation process was not properly set up, in spite of all the offshore projects which have been carried out by them. The lessons which are learned by the local department (where the project was carried out) have not been discussed with the general IT department. Important lessons which may apply to all offshore projects might be lost like this.
Mindset practices: The local department learned a lot from this offshore project. It was the first offshore project for most of the employees which were involved. Naturally they learned a lot about offshore projects and probably they will perform better if they will participate in an offshore project again.

Success
This project was considered unsuccessful, although it is still running at the time the case study was carried out. Eventually, there will be a good system, but at the expense of too much effort of costly onshore employees. Probably the total costs would be even lower if it was conducted completely onshore.
The theoretical model would classify this project as unsuccessful too. The company has a lot of offshoring experience and stated realistic goals in advance. The cost savings which were projected in advance did not take place and therefore the project is unsuccessful.

5.3.3. Work Flow Management System

General
This project concerns the development of a Workflow Management (WFM) system. The interviewee works for a company which has a partner in Cluj (Romania) which carries out the development and part of the testing work, the rest is done onshore in The Netherlands. The system is made for another Dutch company, which is the client with respect to this project. This client provides loss adjusting services to insurance companies.

The development work is done in magic, a programming language which is hardly used in The Netherlands at the moment. This makes it difficult to find suitable people in The Netherlands, if they can be found at all. Enough people with the right magic skills are available in Romania, about 30 Romanian magic programmers work offshore on this project.

Context
The time difference between Romania and The Netherlands is just one hour. The Romanian employees have a hierarchical culture and they are hard working. Sometimes they even propose to be on overtime for the whole weekend. The Romanians are task oriented, they even sent requirements back if it is not enough task oriented because they simply do not know what to do with it.

Process → Offshore project preparation
Readiness: Realistic goals were set before the project started. These expectations have been based on prior projects with the Romanian supplier. Making good project estimates is one of the hardest things to this company, in spite of all the experience they have in doing business offshore.
Mindset practices: The people at the company know about Romania since they work with them each day, so there is no need to inform them before each project. The client was informed about the fact that some work was done in Romania but he did not have any objections because the organization has a good front-end in The Netherlands. The client was confident about the Dutch supplier and therefore the offshore backend did not matter to him, consequently he did not receive any information regarding the cultural differences which could be expected.

Process → Method
Readiness: DSDM MoSCoW was used as system development method. A prototype has been made before the final system is developed. UML and use cases have been utilized to formalize the communication.
Prince2 was used in order to manage the project. Adaptations have been made to the method to make it more suitable for offshoring. The method is more iterative during the start of the project and is getting more linear towards the end.
Mindset practices: The formalized communication enforced a more formal working method at the client. The Dutch company assisted their client in this process, the client anticipated well and got a more formal culture. This was perceived as important to project success at the client's side. The global design was made at the start and was made more detailed during each iteration. It would be best if the design would be fixed from the start but this is impossible to achieve according to the company. There are two transition points in the setup of this project. The first one is from the client to the organization and then from the organization to its offshore supplier. This second stage needs to start earlier according to the interviewee so the offshore supplier gets a better view of the project.

Process → Culture
Readiness: Specifications are sometimes delivered in Dutch by the client. The offshore supplier has a translator who translates all Dutch documents to English. Sometimes problems are encountered because the translation was not completely correct. The English communication between the company and its offshore supplier is going really smoothly, no problems are encountered here. Direct communication between the client and the offshore supplier is also taking place once in a while. Problems are encountered sometimes because the Romanian supplier makes promises to the client which it cannot meet. There are

communication templates and there is an issue management system to arrange communication, although they do not cover everything, as can be seen by this example.
Mindset practices: The Dutch employees used to tell things bluntly, something the Romanians do not feel too comfortable about. Both sides are trying their best to adapt to each other's communication style although it keeps getting a problem sometimes.
The Romanians use to come to The Netherlands somewhere around the middle of the project to meet the onshore organization and the client. This setup is working fine since at this time the project is starting to get critical.

Process → IT activities
Readiness: Just four parties are involved in this project which gives it a clear structure. There is the Dutch organization, its Romanian offshore supplier, the client and an external consultancy agency. This agency was only involved during the start of the project and confirmed the proper setup of the project. This way the organization and its offshore supplier were trusted by the client.
The complexity of the project was high with respect to the business knowledge that was involved and the functional complexity. There were no complex interfaces with other systems, the project could simply be loaded as module in an existing system.
Mindset practices: The project was quite suitable for offshoring, the required technical knowledge was not available in The Netherlands and the remaining knowledge could be transferred. The strategic importance of the project to the client was the only thing what made the project less suitable for offshoring.

Process → IT governance
Readiness: A fixed price contract with some variable parts was used for this project, although the kind of contract has nothing to do with offshoring according to the interviewee. Hardly any legal problems were encountered throughout the project. Even fewer problems are expected to be seen when Romania enters the EU in 2007 (BBC, 2006).
Mindset practices: Iterations take about two months. This is a good duration according to the interviewee. At least two or three FTEs are necessary in order to consider offshoring. There is no upper limit because each project can be cut in pieces which can be handled. The client's maturity and skills of the offshore supplier determine which pieces will be moved offshore and which ones will be kept onshore.

Process → Knowledge sharing
Readiness: A Non Disclosure Agreement (NDA) was signed in advance to secure the confidentiality of knowledge, this made it no longer an issue throughout the project. A knowledge management tool was used so knowledge could be shared across the locations. Running examples were sent to the offshore supplier which they could use to understand the business logic. A running example is a kind of test case which clearly shows how the system needs to work.
Mindset practices: Knowledge was very important to this project. Technical knowledge was not available offshore and business knowledge was only available offshore. The client agreed to move the project offshore because it was easier to move the business knowledge offshore than the other way around.

Process → Offshore project evaluation
Readiness: There is no explicit evaluation process at the company. There may not even be a need for an evaluation process because the organizations conducted a lot of projects with the

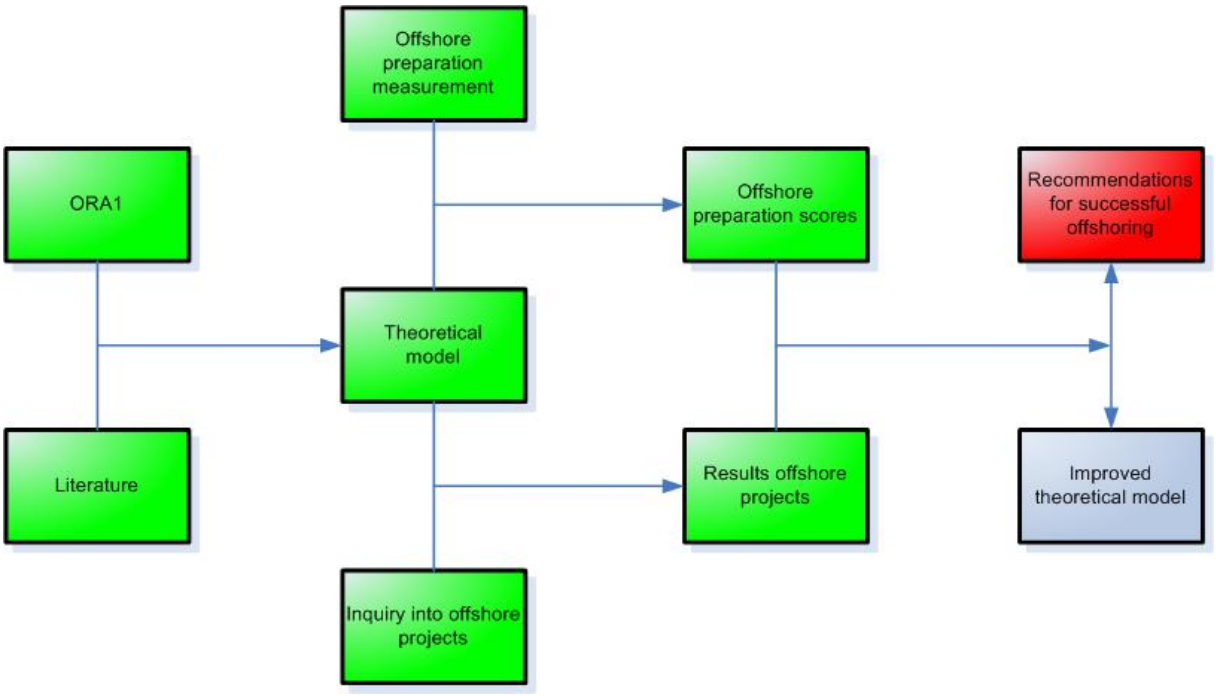
offshore supplier. After all these projects they probably know all too well how it is going and what problems come with this offshore way of working.
Mindset practices: The client learned a lot from this project. It was their first offshore project and they were also in direct contact to the Romanian supplier. The client was enthusiastic about the project and is planning to conduct more offshore project in the future. They can probably achieve more offshore success in term of profit by applying the lessons they have learned from this project.

Success
This project is an example of a good offshore project. The project was moved offshore for obvious reasons (the lack of technical magic knowledge onshore). The realistic goals set in advance were met. These goals comprised the functionality, completion time, and the costs of the variable parts of the contract. The five success factors were also filled in properly by the organization which made the project progress according to expectations.

5.4. Conclusions

The three cases were quite different from each other. They were conducted in different countries (India and Romania), both successful and unsuccessful cases, different sizes (30 and 160 offshore employees) and type of projects (new systems and extensions to systems). The theoretical model (figure 13) appeared to work out quite well in practice since projects that complied more with the model were also perceived as more successful by the organizations. Knowledge sharing was the most crucial success factor in all cases and also resulted in most problems, followed by culture which also leaded to problems. The case studies provided a lot of interesting information which will be readily used when the recommendations to successful offshoring projects will be identified.

Chapter six: Discussion: Recommendations for successful offshoring



The results from both the case studies and the assessment interviews are known now. This chapter will look at the most important findings and use them to provide some recommendations for successful offshoring. Thereby it will answer the fourth research question (*Which lessons can be learned from previously conducted offshore projects and the current situation at Dutch financial institutions?*) and also the fourth objective of the research (Provide guidelines for successful offshoring).

6. Discussion: Recommendations for successful offshoring

Three recommendations will be provided in this research. These are all based on the information acquired during the literature study, assessment interviews, and case studies. The recommendations are:

- Acquire experience and learn from mistakes
- Do not make international communication intercultural as well
- Device a knowledge plan in advance

All the recommendations will be presented in an individual paragraph which will discuss the recommendation.

6.1.Acquire experience and learn from your mistakes

Numerous companies have conducted offshore projects and learned from it. People might be inclined to think that all possible mistakes have been made and all the lessons have been learned. Consequently, a company can simply apply those lessons and move its operations offshore successfully. Unfortunately this is all but true in practice. Even today organizations suffer major setbacks when moving IT offshore. They did not seem to bother enough about others' experiences and offshoring still seems to be underestimated in terms of the problems it will bring.

Organizations can consciously study previous offshore projects and can prevent a lot of problems in doing so. Nevertheless they will most likely encounter some problems during the offshore project anyway. Nothing seems to beat the organization's own offshoring experience when it comes to offshoring's best practices.

Organizations should realize that offshore outsourcing should not be used to attain increases in share price on the short term. Several case studies observed a strong relation between announcements of large-scale outsourcing and positive improvements in the client's share price over the first ten months of a contract (Willcocks, 2005, p. 15). Rather it is a sustainable way of improving organizational performance in the long term and with respect to the reasons set in advance, e.g. cost savings, improved quality or shorter time to market.

This learning curve was also an initial assumption which was expressed in the theoretical model by the arrow which returned to offshore project preparation from offshore project evaluation. This was taken into account because Willcocks clearly communicated this point.

The importance of experience also clearly stems from the case studies and assessment interviews. The 28th question from the IT governance success factor (We gained a lot of experience during previous offshore projects which is readily applicable to new projects?) was used to test this assumption. All the organizations to which this question was applicable completely agreed with it. Making it the only question where all interviewees answered the same. Also in the case studies evidence was found which showed the importance of experience. A lot of things went wrong because of poor judgement related to a lack of experience. An example includes the underestimation of working with a different culture. The interviewees would certainly pay more attention to cultural awareness at both sides if one more offshore project would be carried out.

Mistakes in offshoring projects should initially be considered as something collateral, it is part of the deal. The important part is to learn from all the mistakes that have been made and prevent them from occurring again in the future. New experience is gained each project and gradually the organizations will achieve better results from offshoring. Most can be learned if explicit attention is paid to learning, this can be achieved by enforcing project evaluation aimed at addressing and then learning from mistakes.

Offshoring IT work is something an organization cannot easily do successfully every once in a while like buying new furniture or setting up a new marketing campaign (unless it involves some small, non complex projects). As already stated offshoring requires a lot of experience which can only be gained by engaging in projects. Offshoring will most likely fail if an organization does a half-hearted attempt because it does not have the experience. Therefore the decision to engage in offshoring is a strategic one which has it implications on the company. Probably some people need to be laid off and the other people need to get aware of the new way of working. Offshoring can become a sustainable competitive advantage when the organization chooses for it, applies lessons learned from mistakes made in the past and accepts the uncomfortable initial troubles it will face.

6.2. Do not make international communication intercultural as well

Communication problems seem to inherently come with offshoring projects, with the case studies being no exception. A lot of communication problems did arise in cooperating with an offshore supplier, especially if it was not a European supplier. However communication problems seem to pop up in every offshoring project.

The people in the first case study (about the mortgage mid and back office system) did not have a lot of offshoring experience. A lot of communication problems were encountered, especially in the beginning. The problems were so severe that it was decided to permanently keep one Dutch manager at the offshore supplier who could serve as contact person. Things definitely went better after this transfer.

The interest calculation system was implemented at a company which already had a lot of experience with offshoring. They used to transfer a quarter of the offshore people onshore who take care of all the communication with the offshore side. This project was no exception to that rule, except this figure being one third.

In fact both companies did the same thing in order to overcome much communication problems, they left the communication between on and offshore to people of the same culture. In the first case study the Dutch took care of all this communication. The Indians fulfilled the same role in the second case study. This seems to be a clever project setup. All the communication which needs to be done between dispersed locations is very error prone. This risk of error is mitigated by the fact that only people from the same company with the same cultural background take part in this communication. The communication between people of other cultures, which is necessary anyway, can then be done at the same site. Communication between people from different cultures is very error prone either. This can now be done face to face which mitigates the risks of errors or miscommunications. This setup can be omitted when the company has a lot of experience with the offshore supplier or if culture is pretty similar, which can be assessed by using Hofstede´s cultural dimensions (2003).

This setup can be hard to actually achieve. People need to be willing to move for a long time in the first place. It may be hard to find suitable people for this task, maybe some young inexperienced people will volunteer. However it is better to send more experienced and thus older employees, whom may well be unwilling to go abroad for a long time. Furthermore it will cost quite a lot of money which may be an objection to the organization. However miscommunications and their consequences also cost a lot of money. Complex projects with certain differences in culture make this setup really advisable since it can save a lot of money, delays, and frustration.

6.3. Devise a knowledge plan in advance

Knowledge sharing contributes to success in projects executed at dispersed locations (Kotlarsky, 2005). The assessment interviews suggested that knowledge has an important role at the Dutch financial institutions. Just eight percent disagreed with the proposition that a lot

of knowledge was involved in the business, which makes it hard to let a third party carry out the work. All the others more or less agreed with this proposition.
Knowledge was also an important issue during all three case studies. Specific kind of business knowledge usually leads to problems when working with an offshore supplier, while their technical knowledge suffices. A lot of attention was paid to the transfer of this knowledge to the supplier, but still many problems were encountered. This event from the first case serves as a good example of the lack of business knowledge at the offshore supplier: some Indians involved in the first project drove around in Utrecht accompanied by some Dutch who were also in this project. The Indians asked why streets always had different names at both sides. The Dutch really wondered how they could possibly come to this thought, then it appeared that the Indians derived it from the business models they had obtained. This small event clearly shows how easily things can get wrong for even low-level general knowledge, imagine what disasters could strike when high-level business knowledge is involved.
Successful cooperation with respect to business knowledge can be acquired by following a two step approach. The first step is often omitted and consists of making a business knowledge plan which describes what knowledge should be transferred. How this knowledge should be properly transferred is determined during this second step. This second step will not be discussed here, lots of authors already wrote about efficient knowledge sharing. Kotlarsky is a good example, she identified four best practices for it.
This business knowledge plan should be made in advance and must take account of the offshore supplier. Transferring all business knowledge is pretty dangerous, especially if the offshore supplier comes from a completely different culture. Practice shows that the work it takes to transfer knowledge to an offshore supplier is often underestimated. Organizations should be aware of this lesson and make a conservative analysis of the work it takes to transfer knowledge offshore.
Business knowledge which is completely unavailable at the offshore supplier (like knowledge about mortgages or interest calculation) might well be kept onshore. In the second cases the interviewee indicated that the project could probably be executed cheaper offshore for knowledge reasons, while the first case also encountered a lot of problems which were due to knowledge. Basically a cost benefit analysis can be used were the costs and benefits of transferring a certain piece of knowledge are compared with one another.
An iterative approach might be appropriate to this transfer of knowledge. Less business knowledge is transferred first and gradually more business knowledge can be moved offshore when no problems are encountered.
Playback should be used as a technique to check whether the supplier really possesses all required knowledge. That means the offshore supplier must for example host a presentation were they present the business knowledge, afterwards questions can be asked by the client. The project can start when the offshore supplier has sufficient business knowledge according to the client. This technique would be especially useful when the offshore supplier comes from a country with a high score on the power distance dimension of Hofstede's (2003) cultural model. Usually people in these countries refrain from saying no and thereby give the client the impression they do understand the business knowledge, while in fact they do not.

6.4. Conclusions

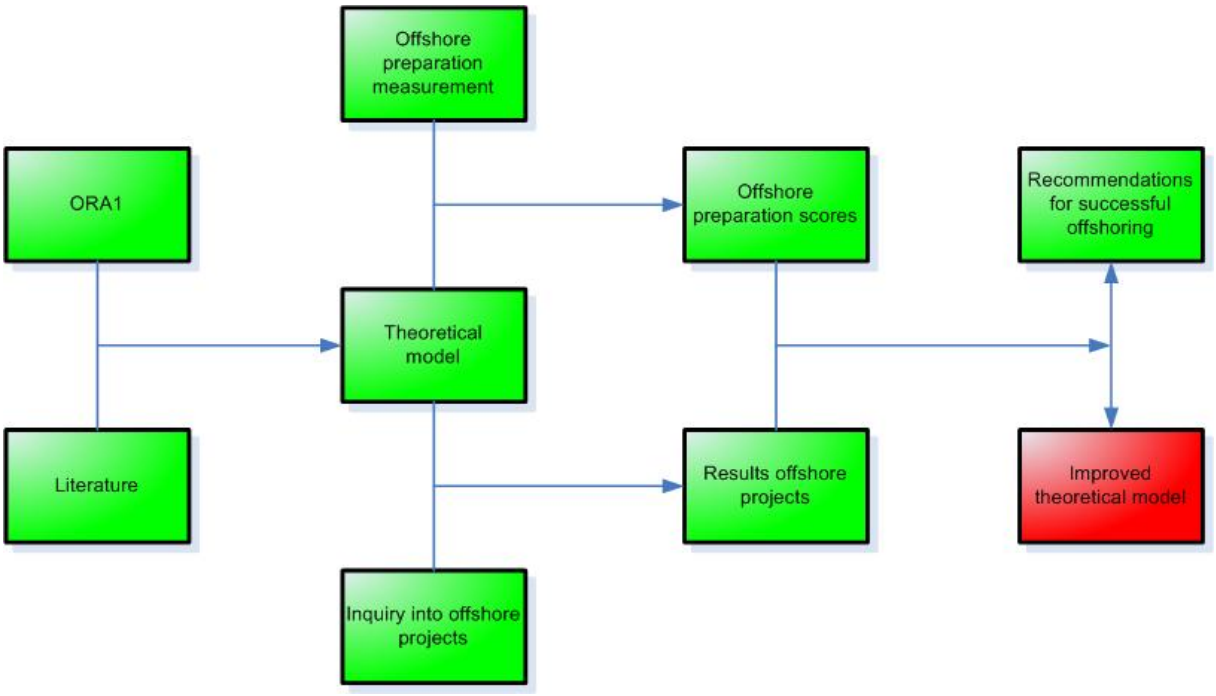
Three recommendations have been provided based on the findings from the assessment interviews and case studies. The three recommendations are stated beneath and are shortly described:

- *Acquire experience and learn from mistakes:* organizations need to make a strategic decision when it comes to offshoring. They need to conduct multiple offshore projects if they decide to engage in offshoring. Probably things will go wrong the first time, but

this does not matter as long as the organization learns from it. These mistakes can be prevented the second time. Likewise they can learn and eventually achieve the business goals which offshoring is supposed to bring like cost savings, better quality or shorter time to market.

- *Do not make international communication intercultural as well:* Two types of potential error prone communication is necessary in offshore project. Communication between the dispersed locations and between people from different cultures. These two types should not be combined because too much mistake will occur in this setup. Separating these kinds of communication can be done by permanently moving some of the onshore people offshore of transferring some offshore people onshore. This setup only pays off when the project's complexity and the cultural differences are large enough to make up the extra costs that come with this setup.
- *Device a knowledge plan in advance:* Knowledge is the cause of a lot of offshore failures. The amount of technical and business knowledge available at on and offshore side can differ a lot. These differences must be listed in advance and a plan must be devised which describes how to prevent problems related to differences in knowledge.

Chapter seven: Critical reflections & Improvements to research



This last chapter will evaluate the whole process and will provide improvements to the research. Hereby it answers the fifth research question (*What further improvements can be made to the research with the experiences of ORA2 in mind?*). Subsequently it will provide ideas for future research and place this in the context of expected future offshoring trends at Dutch financial service providers.

7. Critical reflections & Improvements to research

The theoretical model of the research was largely bound by ORA1 because of comparability reasons. The next paragraph will critically reflect on the research and address some things which could have done better. The limitations of the research will be discussed in the next paragraph. Subsequently improvements to the research will be provided. These improvements forget about the comparability issue and provide more profound changes which will break comparability to ORA1. After that, one paragraph will present the results from ORA2 if these improvements were already applied in this research. The final paragraph will describe the changing environment in which the Dutch financial institutions operate. ORA3 will be subject to this environment if it will ever be executed.

7.1. Critical reflections

The Information System research is characterized by two main paradigms, the behavioural science and design science paradigm (Hevner, 2005). Behavioural science tries to develop theories which explain human or organizational behaviour. Design science tries to develop an artefact which incorporates knowledge and understanding of the problem domain. The assessment interviews are an example of design science since there is an underlying model or artefact which describes how to outsource successfully. The case studies are an example of behavioural science because they try to explain the organizational behaviour I an offshore project. Hevner (2005) argues that both design science and behavioural science paradigms are needed to ensure the relevance and effectiveness of IS research. Hevner (2005) also identified seven guidelines which can be used for effective design science. Table 10 explains the seven guidelines:

Guideline	**Description**
Guideline 1: Design as an artifact	Design-science research must produce a viable artifact in the form of a construct, a model, a method, or an instantiation.
Guideline 2: Problem relevance	The objective of design-science research is to develop technology-based solutions to important and relevant business problems.
Guideline 3: Design evaluation	The utility, quality, and efficacy of a design artifact must be rigorously demonstrated via well-executed evaluation methods.
Guideline 4: Research contributions	Effective design-science research must provide clear and verifiable contributions in the areas of the design artifact, design foundations, and/or design methodologies.
Guideline 5: Research rigor	Design-science research relies upon the application of rigorous methods in both the construction and evaluation of the design artifact.
Guideline 6: Design as a search process	The search for an effective artifact requires utilizing available means to reach desired ends while satisfying laws in the problem environment.
Guideline 7: Communication of research	Design-science research must be presented effectively both to technology-oriented as well as management-oriented audiences.

Table 10: Design science research guidelines

This paragraph will take a critical look towards the research and list aspects which could have done better or simply come as a drawback because of the research setup. They are ordered based on the guidelines Hevner provided.

- *Guideline 2 (Problem relevance), increased offshore expectations at Dutch financial institutions:* The increase in score may be so small because more is expected at the moment from the IT department. The architecture related questions serve as a good example of this proposition. The interviewees valued their architecture at a lower level compared to two years ago. On the other hand they indicated to have a better relationship between their applications and corresponding business process and owners. The average readiness and mindset score may be higher if the interviewees used the same frame of reference as in ORA1. This is a drawback which comes with an assessment that compares situation at different points in time and makes it harder to uncover relevant phenomena.
- *Guideline 3 (Design evaluation), no internal validation:* One drawback of measuring the offshoring readiness and mindset of a company is the fact that it is hard to internally validate the research. This hampers to demonstrate the utility, quality and efficacy of the design artefact. The readiness and mindset results used to determine the result if the company moves IT work offshore. It is not possible to see if these scores hold if offshoring is not actually done. The theoretical model is partly externally validated by all the authors consulted in the literature study and the case studies which were conducted. The setup of the research partly implies this internal validation issue, some companies which participated do offshore on the other hand. There was no question which assessed whether this was done successfully. A question like this had to be added in order to be partly able to internally validate the research. This was not done because it was forgotten when the questionnaire was composed.
- *Guideline 4 (Research contributions), ad hoc questionnaire design:* The questionnaires from the assessment and the case studies were designed in an ad hoc fashion, except for the questions which were derived from Kotlarsky's best practices. Some questions which seemed to be appropriate to a success factor were added and other less appropriate questions from ORA1 were removed. This approach yields the risk of getting an unbalanced set of questions. A top down approach might have been better for designing the questionnaire. In this approach, some relevant areas will be identified first for each success factor in a top down manner. Subsequently questions can be added for each area. This ensures that the final set of questions will be better balanced between all relevant areas. More could be contributed to IS research if this mistake was not made.
- *Guideline 5 (Research rigor), small number of participating organizations:* Twelve organizations took part in the assessment interviews. This is a small percentage of the total number of players at the market, although there was a big diversity of organizations in terms of size, amount of work carried out offshore, organizational maturity etcetera. Nevertheless it might be arguable whether this set of companies makes a representative sample of all Dutch financial institutions. A more rigorous approach would have resulted in a more reliable data set.
- *Guideline 6 (Design as a search process), more aspects could be added to assessment questionnaire:* After the assessment interviews and case studies, each interviewee was asked about his opinion about the questionnaire. Two people had any comment regarding the assessment interviews, one interviewee from an organization with a lot of offshoring experienced argued that it might have been better if it was more aimed at managing your supplier. He expected some questions like: "What would you if your supplier does not perform according to expectations?", the other thought that larger

organizations would in general score better while being bigger is not necessarily an advantages when it comes to offshoring. The latter comment was really interesting. The results also suggest that there might be a positive relation between the size of the organization and the score it acquires, however it is unclear if this relation does exist in practice as well. Therefore it might have been an idea to take the size of a company into account. These improvements have been found because of the iterative nature of the research and can help to make the next research more effective.

7.2. Limitations

One might be tempted to use the assessment interview in order to measure the offshore potential of a company by simply interviewing an IT manager. It would be powerful tool if it could reliably measure the offshore potential like this. Theoretically, the questionnaire must be able to provide good advice but most likely the result is highly influenced by the interviewee. Some examples which can result in interference are: some people are more optimistic than others, other people would be a lot more eager to agree or disagree than others, who are more reserved and tend to pick answering possibilities in the middle. Probably another result will be achieved if another person would answer the questions. This does not mean that the research results will be unreliable either for the same reasons. A lot of people did answer the questionnaire so personal characteristics will level off. Therefore this questionnaire will be a good tool to measure the offshore potential of a sector but not for an individual company, unless a number of people at the same company are able and willing to answer the questionnaire. This may be hard in practice because only people at CIO level are able to answer all questions. In general there are not that many people at that level in an organization and they are busy so they may not bother to participate.

7.3. Improvements to Research

The readiness mindset matrices are completely the same as during ORA1. It was very hard or even impossible to change this matrix without completely losing the comparability to ORA1. Quite a lot of times it is unclear whether a question belongs to readiness or mindset. The first question from the activity success factor serves as a good example (How much big offshore projects are conducted by your organization?). On one hand an organization which conducted more offshore projects learned from it and applied lessons from it and thereby it is closer to the state of being ready. On the other hand, employees at this organization learned from previous offshore projects and therefore their attitude towards offshoring will be better. This can have an incorrect influence on the score. Another approach which does not suffer from this drawback is to forget about readiness and mindset and simply add up all the scores. Besides losing some error it will make the results easier, just a single figure instead of two. This value can be plotted against another parameter in order to see a relationship in an easy two dimensional graph. Another pragmatic reason is that readiness usually comes with mindset (or the other way around), this makes the distinction between readiness and mindset unnecessary in the first place.

Another peculiar thing inherited from ORA1 was the distribution of points. For some reason the number of points which were awarded to each question differed largely. Some questions have a maximum score of one point while others have four. Another odd thing was the fact that sometimes multiple answers were awarded the same number of points. This means that sometimes it does not matter to the score whether an interviewee answers “disagree” or “more disagree than agree”, this is rather strange conceptually. The solution to overcome these issues is to simply use the same distribution for each question and use all distinct values.

7.4. ORA2 with improved theoretical model

The previous paragraph provided two improvements which were not applied initially because comparability with ORA1 would be lost. This paragraph will show the results if the distinction between readiness and mindset would not be made and if the distribution in the points would always be zero, one, two, and three. Table 11 shows the average score and all the individual scores when this approach is used. The same formula is used to calculate the scores.

	Method	**Culture**	**Activities**	**IT-Governance**	**Knowledge Sharing**	**Average**
Company 1	77%	79%	27%	80%	46%	**62%**
Company 2	70%	71%	68%	85%	59%	**70%**
Company 3	39%	52%	35%	43%	74%	**49%**
Company 4	73%	55%	36%	47%	38%	**50%**
Company 5	36%	55%	9%	43%	46%	**38%**
Company 6	62%	73%	61%	71%	79%	**69%**
Company 7	64%	53%	17%	64%	62%	**52%**
Company 8	65%	64%	19%	49%	72%	**54%**
Company 9	18%	68%	47%	42%	67%	**48%**
Company 10	45%	64%	45%	69%	72%	**59%**
Company 11	61%	42%	17%	60%	62%	**48%**
Company 12	48%	58%	16%	48%	51%	**44%**
Average	**55%**	**61%**	**33%**	**58%**	**61%**	**54%**

Table 11: ORA2 results with improved theoretical model

Table 11 shows that the improved theoretical would not make the results much different. The average score of 54 percent is close to the 49 percent score at readiness and 52 percent at mindset during ORA2. It is also clear that activities score the worst and the score differs a lot per company.

7.5. ORA3 context

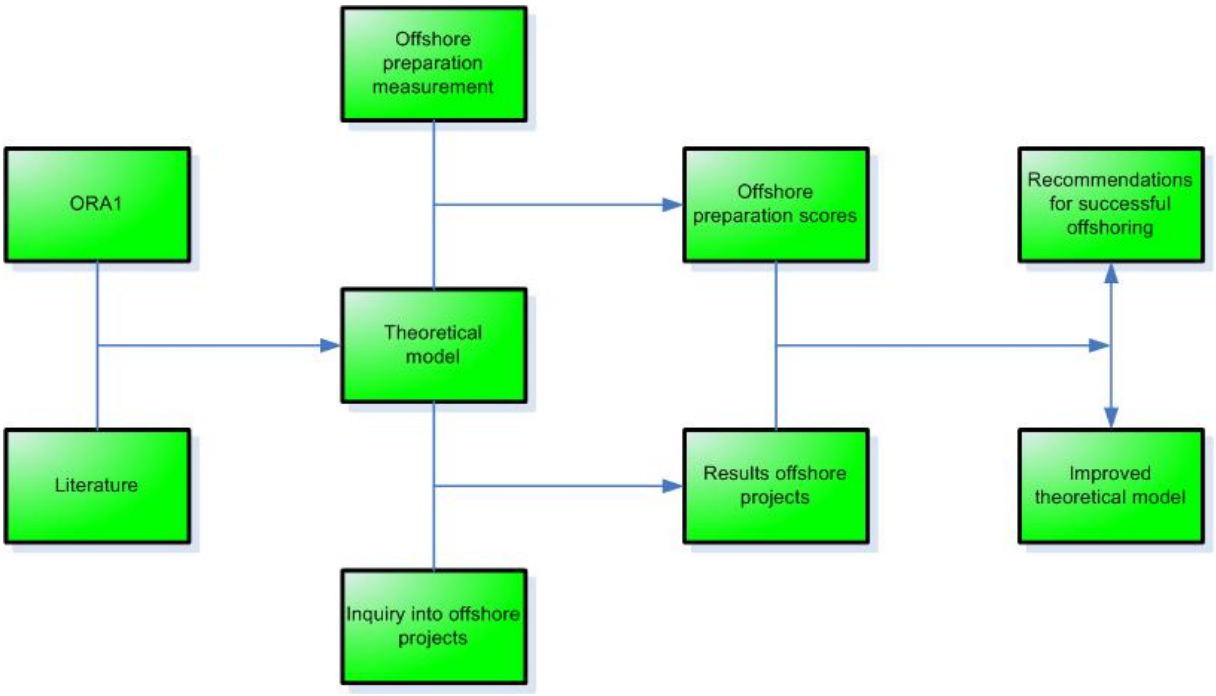
Some big Dutch financial institutions do already conduct a lot of their IT work offshore while others consciously decided to keep it all onshore. Well known examples of the former are ABN and ING while Rabobank is the best know example in the latter category. Only future can tell which decision will turn out to be the best.
Vallstein (2006) carried out a research called ‘Bank van het jaar’ (Bank of the year) where the best bank was chosen. Rabobank won this contest by a wide margin from ABN and ING. One of the findings was that the service to clients was hampered by offshoring. Nevertheless Rabobank was not sure whether it could keep all its operations onshore. Cost reasons could force them to move operations offshore.
All these developments provide an interesting context for a third Offshore Readiness Assessment. Besides this research shows that still a lot of companies are still afraid of offshoring and not much progress has been made compared to ORA1. It is not yet completely clear if offshoring will be a management fad to Dutch financial institutions or if it will be a major new development. A third ORA may be able to provide answers at these questions and can provide interesting lessons, especially if the critical reflections are taken into account.

7.6. Conclusions

The main limitation of this research is the fact that it is hard to use the assessment questionnaire as a tool to measure how well an individual company is prepared for offshoring. The personal characteristics of the interviewee influence the score and thereby make it unreliable. This does not influence the average score because personal differences will level off.

This chapter answered the final research question, which was *Further explore the limitations of the research and provide directions for further improvements*. These improvements comprise the same score distribution for all questions and forget about readiness and mindset, instead a one dimensional score is given to a company at each success factor. These improvements do not cause significant other results. The scores for companies and success factors stay about the same when this improved method is applied to ORA2. Although a better method is used for calculating these scores.

Chapter eight: Conclusions



All the parts from the research approach are discussed in previous chapter, as can be seen by all the green boxes in the research approach shown above. This chapter will present the conclusions of all parts of the research.

8. Conclusions

This final chapter will start with a short introduction of some background knowledge which is needed to understand the research:

- *Offshoring and outsourcing:* This research is about offshoring of IT work. Offshoring means conducting work abroad. This is closely related and often used intertwined with outsourcing, which is about transferring work to another party.
- *Yellowtail:* Yellowtail is an organization which delivers IT project management, business consultancy and architecture services. They have initiated this research.
- *Offshore Readiness Assessment 1 (ORA1):* ORA1 was conducted by Yellowtail two years ago and assessed the degree to which Dutch financial service providers were prepared to offshore their IT work.

Research setup

This research is called Offshore Readiness Assessment 2 (ORA2) and is a follow-up study based on ORA1. This research has five objectives which are stated and briefly explained below:

- *Improve theoretical model:* The theoretical model of ORA1 will be improved first before the actual research takes place.
- *Measure offshore readiness and mindset:* This research (ORA2) will measure how well Dutch financial institutions are prepared for offshoring their IT work. This measurement will distinguish between their readiness and mindset with respect to IT offshoring.
- *Measure change in offshore readiness and mindset between 2004 and 2006:* The degree to which the Dutch financial institutions are prepared will be compared to 2004, which is assessed by ORA1.
- *Provide recommendations towards successful offshoring:* Recommendations to successful offshoring will be provided based on the findings from the research.
- *Further explore the limitations of the research and provide directions for further improvements:* Improvements to the research will be provided based on all the experiences gained throughout the research.

Five research questions have been composed which all correspond to an objective. These research questions have made objectives more operational.

Literature study

A literature study has been conducted to gain knowledge about the subject. This knowledge was eventually used to develop a theoretical model. Kotlarsky (2005), Willcocks (2005), Aron (2005), Carmel (2002), and Walsham (2005).

Kotlarsky's approach is focused around the five success factors and 22 best practices she identified. These are found during four extensive case studies. All the best practices were perceived in practice and believed to really contribute to success in GD CBD.

Willcocks emphasizes the cyclical nature of IT outsourcing. Each project is one loop through the circle and provides the organizations with more knowledge which it can use during its next IT outsourcing projects. Furthermore, Willcocks provides some guidelines which can be easily employed in an IT outsourcing project.

Aron provides a detailed overview of all the risks that can be encountered during an offshore outsourcing project. Profound insight in the risks that come with offshoring is essential before it can be decided to move operations offshore. Risks can be too high which will cancel the

offshore project, risks can also be so severe that they need to be mitigated before the offshore project can actually start.
Carmel identified four different stages which describes the offshore maturity of a company. Most companies start in the first stage in which they do not engage in offshoring. They reach the second stage if they start offshoring. From here they can fall back to the first stage or go further up in the model to the third or fourth stage, in which offshoring respectively brings costs savings or fulfils a wide variety of strategic goals.
Walsham developed a template which can be used to examine cross-cultural working. This template takes the following four factors into account: structure, culture, cross-cultural contradiction and conflict, and reflexivity and change. Walsham's ideas are originated in the structuration theory which treats human action as a duality rather than a dualism.

Theoretical model
A theoretical model is composed which shows how to successfully conduct an offshore project. This model is based on the literature and Yellowtail's own experience. This model serves to fulfil the first objective of the research.
The model consists of three main parts, context, process, and success. The context consists of all the factors which are impossible or really hard to change by the organization when it is moving IT work offshore.
The process consists also of three main parts itself. First there is the preparation stage where the goals are set and an offshore plan is made. This first stage is based on the context and the experience gained in previous projects. The offshore operations can start when the offshore plans are completed. The company needs to pay continuous attention to the five success factors during this stage. The final part of the process stage is the offshore project evaluation, which extracts the lessons learned from the project. These lessons can prevent that mistakes would reoccur in the next project.
Success is the last part of the model, a project can be classified successful if it met the goals set in advance. Goals need to be stated higher every project because the organization learns from its mistakes.

Offshore preparation Dutch financial service providers
ORA2 is executed in a similar manner as ORA1, therefore it is possible to compare the results. Personal interviews were chosen as technique to collect the data, twelve people from different financial institutions answered the closed questions. A readiness mindset matrix is used to measure how well Dutch financial institutions are prepared for offshoring
The increase in score which was expected based on the experience from two years ago was not found, so there was no reason to believe that this increase did actually took place. Figure 18 shows the results from ORA2 on the right while the results from ORA1 are shown left. The blue dots represent individual companies which participated while the red dot is the average score.

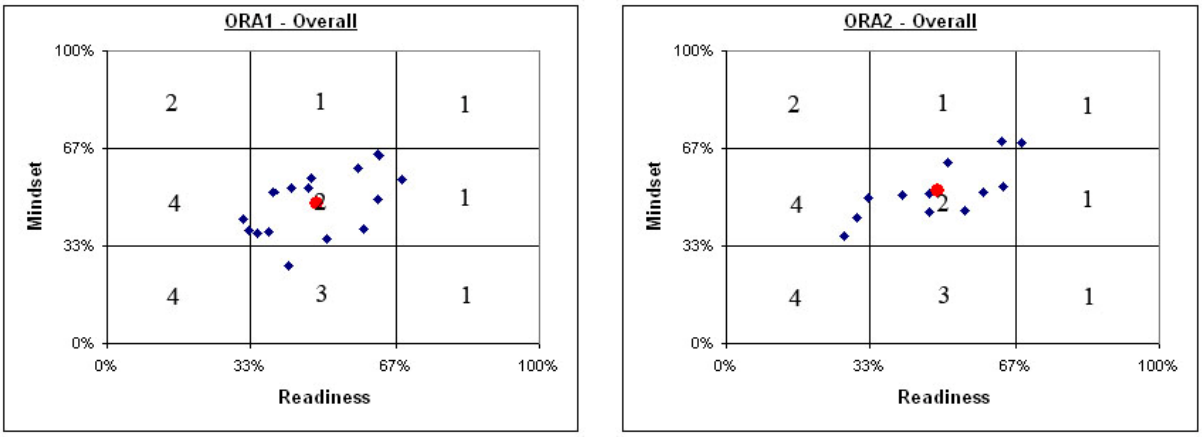


Figure 18: Results ORA1 (2004) and ORA2 (2006)

An advice regarding offshoring is given based on the area number of the matrix in which the company is situated. This matrix shows that eight of the twelve participating companies have the potential to offshore successfully (area 2) and two are ready for offshoring (area 1). Companies positioned in the third or fourth area are advised against offshoring. The second objective is met hereby.
ORA1 and ORA2 are compared to meet the third objective. Prior to this research it was expected that the Dutch financial institutions would be a lot better prepared for offshoring. This research showed that the readiness and mindset was about the same as two years ago. The readiness increased from 48 percent to 49 percent and the mindset increased from 48 percent in 2004 to 52 percent in 2006. Therefore there is no reason to believe in the correctness of this expectation based on the results from the assessment interviews. However, some changes have been taken place at individual success factors. These changes are not tried to be explained since that is not the nature of an assessment. The following changes have been taken place:

- Method readiness decreased from 62 percent to 49 percent.
- Culture mindset increased from 42 percent to 63 percent and culture readiness from 39 percent to 48 percent.
- IT activities mindset decreased from 51 percent to 34 percent.

Case studies
Three offshore projects at Dutch financial institutions have been analyzed by means of a case study to acquire more insight into these projects. These cases were quite different from each other because they took place in different offshore countries (India and Romania), both successful and unsuccessful cases, different sizes (30 and 160 offshore employees) and type of projects (new systems and extensions to systems). Knowledge sharing was the most crucial success factor in all cases and also resulted in most problems, followed by culture which also leaded to problems. The case studies provided a lot of interesting information which will be readily used when the recommendations to successful offshoring projects will be identified (fourth objective).

Discussion: Offshore recommendations
Three recommendations have been provided based on the findings from the assessment interviews and case studies. These recommendations serve to cover the fourth objective. The three recommendations are stated beneath and are shortly explained:

- *Acquire experience and learn from mistakes:* organizations need to make a strategic decision when it comes to offshoring. They need to conduct multiple offshore projects

if they decide to engage in offshoring. Probably things will go wrong the first time, but this does not matter as long as the organization learns from it. These mistakes can be prevented the second time. Likewise they can learn and eventually achieve the business goals which offshoring is supposed to bring like cost savings, better quality or shorter time to market.

- *Do not make international communication intercultural as well:* Two types of potential error prone communication is necessary in offshore project. Communication between the dispersed locations and between people from different cultures. These two types should not be combined because too much mistake will occur in this setup. Separating these kinds of communication can be done by permanently moving some of the onshore people offshore of transferring some offshore people onshore. This setup only pays off when the project's complexity and the cultural differences are large enough to make up the extra costs that come with this setup.
- *Device a knowledge plan in advance:* Knowledge is the cause of a lot of offshore failures. The amount of technical and business knowledge available at on and offshore side can differ a lot. These differences must be listed in advance and a plan must be devised which describes how to prevent problems related to differences in knowledge.

Limitations and further improvements to the research

The main limitation of this research is the fact that it is hard to use the assessment questionnaire as a tool to measure how well an individual company is prepared for offshoring. The personal characteristics of the interviewee influence the score and thereby make it unreliable. This does not influence the average score because personal differences will level off.

Further improvements to the research have been identified to cover the fifth and final objective. These improvements comprise the same score distribution for all questions and forget about readiness and mindset, instead a one dimensional score is given to a company at each success factor. These improvements do not lead to significant other results. The scores for companies and success factors stay about the same when this improved method is applied to ORA2. Although a better method is used for calculating these scores.

List of Abbreviations

BPO: Business Process Outsourcing
CB(D): Component Based (Design)
CMM: Capability Maturity Model
DSDM (MoSCoW): Dynamic Systems Development Method (Must, Should, Could, and Won't haves)
EAS: Enterprise Architecture Services (Department of Yellowtail)
ERP: Enterprise Resource Planning
EU: European Union
FTE: Full Time Equivalent
GD CBD: Globally Distributed Components Based software Development projects
GDSD: Globally Distributed Software Development projects
ICT: Information and Communication Technology
IP: Intellectual Property
IS: Information Systems
IT: Information Technology
ITES: Information Technology Enabled Service
ITO: Information Technology Outsourcing
KM(S): Knowledge Management System
KPI: Key Performance Indicator
MCA: Market, Competence and Advantage
MIS: Management Information Systems
NDA: Non Disclosure Agreement
NIH: Not Invented Here
OB: Organizational Behaviour
ORA1: Offshore Readiness Assessment 1
ORA2: Offshore Readiness Assessment 2
R&D: Research and Development
RFP: Request For Proposal
RUP: Rational Unified Process
SITO: Sourcing of IT work Offshore
SLA: Service Level Agreement
TCS: Tata Consultancy Services
UK: United Kingdom
UML: Unified Modelling Language
USA: United States of America
USD: United States Dollar
Wfd: Wet financiële dienstverlening
WIA: wet Werk en Inkomen naar Arbeidsvermogen

Literature References

- 1to1media. (2006). *How outsourcing translates in Eastern Europe*. http://www.1to1media.com/View.aspx?DocID=29117&m=n (15 Sep. 2006)
- Aron, R., Clemons, E.K. & Reddi, S. (2005). Just Right Outsourcing: Understanding and Managing Risk. *Journal of Management Information Systems* vol. 22, no. 2, pp. 37-55
- BBC. (2006). *Romania and Bulgaria hail EU deal*. http://news.bbc.co.uk/2/hi/europe/5383456.stm (27 Sep. 2006)
- Blinder, A.S. (2005). *Fear of Offshoring*. Princeton University: CEPS working paper No. 119
- Carmel, E. & Agarwal, R. (2002). The Maturation of Offshore Sourcing of Information Technology Work. *MIS Quarterly Executive* vol. no. 2, pp. 65-76
- Carmel, E. & Tjia, P. (2005). *Offshoring Information technology. Sourcing and Outsourcing to a Global Workforce*. 1st edition. Cambridge: Cambridge University Press.
- College of Computers. (2006). *Questionnaire Design*. http://www-static.cc.gatech.edu/classes/cs6751_97_winter/Topics/quest-design/ (9 May 2006)
- Crone, F. (2006). *Banken*. http://www.pvda.nl/renderer.do/menuId/107719/clearState/true/sf/107719/returnPage/107719/itemId/32133/realItemId/32133/pageId/107750/instanceId/107734/ (28 Sep. 2006)
- Dictionary.com. (2006). *Dictionary.com*. http://www.dictionary.com (27 Sep. 2006)
- Economist. (2005). *Can South Africa ride the outsourcing and offshoring wave?* http://www.commark.org/Downloads/ComMarkInTheNews/Economist%20-%20Offshoring%20Into%20Africa.pdf (27 Aug. 2005)
- Ellram, L. (1995). Total Cost of Ownership. An analysis approach for purchasing, *Journal of Physical Distribution and Logistics Management* nr. 8, pp. 4-23
- het Financiële Dagblad. (2006). *Offshoring of Outsourcing*. http://www.fd.nl/Dossier.asp?Context=N%7C10&DossierId=457 (27 Sep. 2006)
- Hevner, A.R. et al. (2005). Design science in Information System Research. *MIS Quarterly* vol. 28, pp. 75-105
- van Hillegersberg, J. (2006). 'Software als service' dwingt IT sector te veranderen, *Automatisering Gids* 23, pp. 17
- Hillenius, G. (2006). *IBM 'Banken stappen over op Linux'*. http://www.opensourcenieuws.nl/index.php/content/view/49/57/ (28 Sep. 2006)
- Hofstede, G. (2003). *Geert Hofstede™ Cultural Dimensions*. http://www.geert-hofstede.com (21 Aug 2006)
- Iyengar, P. et al. (2006) *Magic Quadrant for Offshore Application Services*. http://mediaproducts.gartner.com/reprints/tcs/137244.html (16 Feb. 2006)
- Katz, R. & Allen, T. (1982). Investigating the Not Invented Here (NIH) Syndrome: a look at the performance, tenure and communication patterns of 50 R&D project groups. *R&D Management* vol. 12, pp. 7-19
- King, M. (2005). *Speech by Mervyn King, Governor Bank of England*. http://www.bankofengland.co.uk/publications/speeches/2005/speech248.pdf (13 Jun. 2005)
- Kotlarsky, J. (2005). *Management of Globally Distributed Component-Based Software Development Projects*.

https://ep.eur.nl/bitstream/1765/6772/1/EPS2005059LIS_9058920887_KOTLARSKY.pdf (3 May 2006)

- Lonely Planet. (2006). *South Africa Wildlife, wild times and a culture in repair*. http://www.lonelyplanet.com/worldguide/destinations/africa/south-africa (22 Sep. 2006)
- Mankiw, N.G. & Swagel, P. (2005). *The Politics and Economics of Offshore Outsourcing*. http://www.carnegie-rochester.rochester.edu/Nov05-pdfs/Mankiwpaper.pdf (10 May 2006)
- Ministerie van Financiën. (2006). *Wet financiële dienstverlening*. http://www.minfin.nl/nl/onderwerpen,financiele_markten/financieel_toezicht/wet_financiele_dienstverlening (28 Sep. 2006)
- Molenaar, T. (2005). Stuur niet alles naar India, *Computable*, nr. 7, pp. 20
- Nasscom. (2006). *Nasscom's BPO Strategy Summit 2006 looks at how India can continue to be the preferred ITES-BPO destination*. http://www.nasscom.in/Nasscom/templates/NormalPage.aspx?id=47145 (18 Jul. 2006)
- NK ICT Architectuur. (2006). *Het NK ICT Architectuur 2006*. http://www.nkictarchitectuur.nl/2006/index.htm (16 Oct. 2006)
- Object Management Group. (2004). *Model Driven Software Development and Offshore Outsourcing*. http://www.omg.org/mda/mda_files/M1Global.htm (13 Jul. 2006)
- the Oxford English Dictionary. (1989). *The Oxford English Dictionary*. 2nd edition. Oxford: Clarendon Press
- Palvia, P., Mao, E., Salam, A.F. & Soliman, K.S. (2003). *Management Information Systems Research: What's there in a Methodology?* http://cais.isworld.org/articles/11-16/article.pdf (23 Aug. 2006)
- Rational Unified Process. (2006). *Rational Unified Process. Included in Rational Method Composer*. http://www-306.ibm.com/software/awdtools/rup/ (21 Aug. 2006)
- Ricardo, D. (1817). *On the Principles of Political Economy and Taxation*. 3rd edition. London: John Murray
- Rijsenbrij, D. (2006). *'Outsourcing naar India heeft langste tijd gehad'*. Volkskrant. (27 Sep. 2006)
- Samuelson, P.A. (1969). *International Economic Relations: Proceedings of the Third Congress of the International Economic Association*. London: Macmillan
- Smith, A. (1776). *An Inquiry into the Nature and Causes of the Wealth of Nations*. 5th edition. London: Methuen and Co
- Swanson, E.B. & Ramiller, (2004). N.C. *Innovating Mindfully with Information Technology*. Quarterly Vol. 28 No. 4 pp. 553-583
- Tata Consultancy Services. (2006). *Tata Consultancy Services: Investors Home*. http://tcs.com/investors/default.aspx (24 Aug. 2006)
- UWV. (2006). *Bent u al bekend met de WIA*. http://www.uwv.nl/WIA/wia.asp (28 Sep. 2006)
- Vallstein, (2006). *Dienstverlening banken lijdt onder meer outsourcing*. http://www.fd.nl/ShowRedactieNieuws.asp?Context=N%7C1&DocumentId=29437 (5 Sep. 2006)
- Verschuren, P. & Doorewaard, H. (1995). *Het ontwerpen van een onderzoek*. 3rd edition. Utrecht: Lemma
- Walsham, G. (2002). Cross-Cultural Software Production and Use: A Structural Analysis. *MIS Quarterly* vol. 26 no. 4, pp. 359-380

- Wijnhoven, A.B.J.M. (1999). *Managing Dynamic Organizational Memories. Instruments for Knowledge Management*. Enschede: Twente University Press
- Willcocks, L.P. & Cullen, S. (2005). *Intelligent IT outsourcing: Eight Building Blocks to Success.* 1st edition. Oxford: Elsevier Butterworth-Heinemann
- Yamamoto, M. (2006). *India's salary growth threatens outsourcing*. http://insight.zdnet.co.uk/specials/outsourcing/0,39026381,39150917,00.htm (22 Sep. 2006)
- Yellowtail, (2005). *Offshore Readiness Survey. Zijn de Nederlandse financiële dienstverleners klaar voor IT offshoring?*. Rotterdam: Europoint
- Yellowtail. (2006). *RUP voor offshore development*. http://www.yellowtail.nl/default.asp?V_DOC_ID=996 (24 Aug. 2006)
- Wikipedia1. (2006). *Offshoring*. http://en.wikipedia.org/wiki/Offshoring (15 Sep. 2006)
- Wikipedia2. (2006). *Outsourcing*. http://en.wikipedia.org/wiki/Outsourcing (15 Sep. 2006)

Appendix A: Questionnaire assessment ORA1

This appendix contains the questionnaire as used during the interviews for the organizational assessment. This one is a translation from the original questionnaire which was in Dutch. An asterisk (*) behind the question number means that the questions also appeared in ORA2.

Yellowtail Offshore readiness assessment 2004

How successful would you outsource your IT activities abroad?

Company Name	
Department Name	
Interviewee Name	
Job Role	
Phone Number	
Email address	
Date	

All answers will be treated confidentially

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PART 1/4: METHOD

Open Question 1*: Which method is used right now (in theory) within the IT organization and what percentage of projects are actually using this method?

…….

……..

……

Open Question 2*: What is the common opinion within the organization regarding the relation between a standard method and success of IT-projects?

…….

……..

……

		Completely Disagree	Disagree	Agree	Completely Agree
M1*	Our project managers are certified in the same project management methods (e.g. DSDM, Prince2 or RUP).	☐	☐	☐	☐
M2*	We have a consistent set of metrics that is collected during the project execution. This results in changes at our IT project approach.	☐	☐	☐	☐
M3	Our project reports are standardized over all projects.	☐	☐	☐	☐
M4*	A formal risk assessment is carried out as a first step at each important project.	☐	☐	☐	☐
M5*	We implemented component based applications (i.e. we successfully deployed applications based on CORBA, J2EE or Microsoft COM/COM+/.NET)	☐	☐	☐	☐
M6*	There is a strong and positive relation between working by means of a structured approach and the predictability + success of a project.	☐	☐	☐	☐
M7	The project team first analyses the existing application portfolio and guidelines of the technical application infrastructure before a packet or custom made application will be purchased.	☐	☐	☐	☐
M8*	We did define and document an application architecture that includes companywide application principles and standards. This prescribes the relationship between applications and processes in the company.	☐	☐	☐	☐
M9*	We defined a clear risk management process for projects.	☐	☐	☐	☐
M10*	We recognize different scenarios for projects that come with significant risks.	☐	☐	☐	☐

		Completely Disagree	Disagree	Agree	Completely Agree
M11*	We always use an iterative system development method in our projects.	☐	☐	☐	☐
M12*	Application testing is done by automated tools. (E.g. performance and regression testing)	☐	☐	☐	☐
M13*	We deliver IT applications that systematically meet the expected performance level	☐	☐	☐	☐
M14	End users participate in the test procedure, they confirm and accept the thing that will be delivered..	☐	☐	☐	☐
M15*	We have a solid and readily available set of standard tools that support all stages of application development.	☐	☐	☐	☐
M16*	Systems, infrastructure and maintenance organization are structured in order to be able to support fast changes in functional, capacity and service requirements.	☐	☐	☐	☐
M17*	The method we are using supports communication processes between remote teams.	☐	☐	☐	☐
M18*	Our IT-processes are executed in a standard way by means of internal and external people and resources.	☐	☐	☐	☐
M19	Our functional designs are of insufficient quality. Therefore I expect programmers to look carefully at this design and change it at the appropriate aspects.	☐	☐	☐	☐
M20*	We do have a clearly defined architecture which describes the principles and standards for applications, information and infrastructure.	☐	☐	☐	☐

PART 2/4: CULTURE

Open Question 1*: Which cultural elements of the organization will facilitate outsourcing of IT activities abroad, according to your opinion?

…….

……..

……

Open Question 2*: Which cultural elements of the organization will hamper outsourcing of IT activities abroad, according to your opinion?

…….

……..

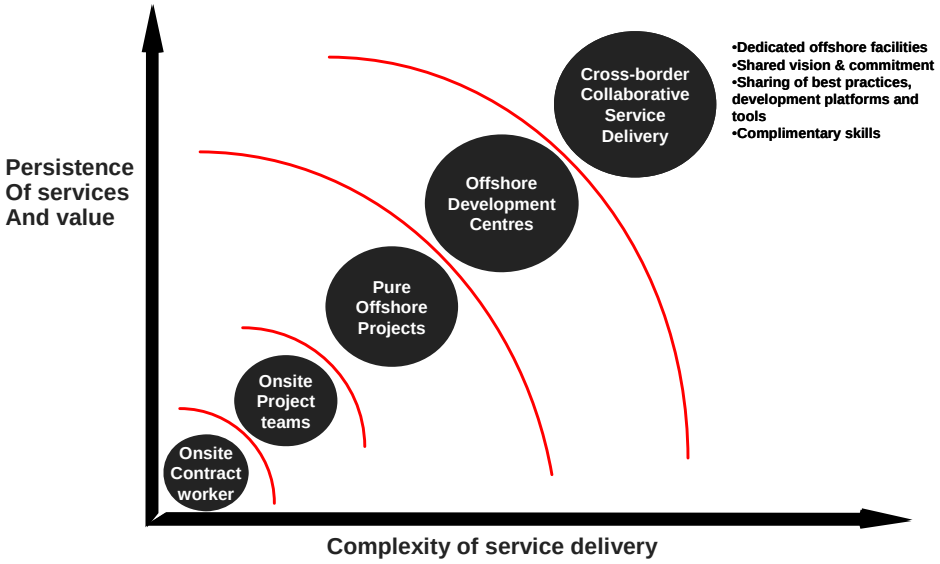
……

		Completely Disagree	Disagree	Agree	Completely Agree
C1*	We do truly evaluate external service as an alternative to our internal business services (e.g. wage administration, web hosting, cleaning)	☐	☐	☐	☐
C2*	We cooperate with our suppliers and clients when implementing inter-organizational solutions.	☐	☐	☐	☐
C3*	Our application owners manage each application like a product manager. A lot of applications are accessible to both internal and external parties.	☐	☐	☐	☐
C4*	Work is carried out successfully by means of a particular appointment via Service Level Agreements (SLA)	☐	☐	☐	☐
C5*	There exists an unofficial circuit wherein deals are made.	☐	☐	☐	☐
C6*	The end-user organization is able to judge IT products on predetermined guidelines, SLAs and specifications.	☐	☐	☐	☐
C7	Maintaining our expected performance level, which is imposed by the IT maintenance department, is a barrier with regard to being able to quickly react at chances in the market.	☐	☐	☐	☐
C8*	The user organization is used to specifications which are frozen after the design stage. The possibilities to change the functionality later on are rather limited.	☐	☐	☐	☐
C9*	The user organization accepts iterative releasing (time to market preferred over complete functionality) as an accepted way of taking system in production.	☐	☐	☐	☐
C10*	User documentation is currently set up in English.	☐	☐	☐	☐

		Completely Disagree	Disagree	Agree	Completely Agree
C11*	The user organization is using English documents at the moment.	☐	☐	☐	☐
C12	People are using English system documentation (maintenance and installation manuals)	☐	☐	☐	☐
C13*	We carry out projects that come with high risk and high potential, knowingly in advance some will fail.	☐	☐	☐	☐
C14*	Applications which are critical to the business are financed based on a model which also charges the extra costs incurred later on (e.g. maintenance)	☐	☐	☐	☐
C15	Applications which are critical to the organization but that do not fit within the architecture, run at external service providers.	☐	☐	☐	☐
C16*	We buy software packets and implement them without committing any change.	☐	☐	☐	☐
C17*	All solutions are constantly reassessed and adapted to the changing company requirements and values to the business.	☐	☐	☐	☐

PART 3/4: IT ACTIVITIES

Open Questions 1*: On the basis of which organizational model does your organization outsource IT-activities? What is your view with respect to this vision?



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Open Question 2*: Which IT-activities are scheduled for outsourcing the coming two years? Which motive is the basis of this planning?

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		Completely Disagree	Disagree	Agree	Completely Agree
A1*	Custom made software activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A2*	Software maintenance activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A3	Packet configuration activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A4	Software conversion activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A5*	IT helpdesk and support activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A6*	We consistently use a well defined purchasing policy regarding IT-activities.	☐	☐	☐	☐
A7*	We are looking for suppliers that can execute the company processes belonging to the software solutions they develop and implement.	☐	☐	☐	☐
A8*	Better quality is the most important reason for outsourcing, we are looking for suppliers that deliver better quality than we can do ourselves.	☐	☐	☐	☐
A9	We lease or own all infrastructure which supports our business	☐	☐	☐	☐
A10*	Our applications computerize clearly defined company processes that do not often cross functional borders.	☐	☐	☐	☐
A11*	We outsource almost all infrastructure components in accordance to our companywide architecture.	☐	☐	☐	☐
A12*	Our most important systems are in continuous transition because of the changes necessary in the business.	☐	☐	☐	☐

		<25%	25%-50%	50%-75%	> 75%
A13*	At this moment, what is the percentage of custom made software where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A14*	What will this be in 2 years?	☐	☐	☐	☐
A15*	At this moment, what is the percentage of software maintenance activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A16*	What will this be in 2 years?	☐	☐	☐	☐
A17*	At this moment, what is the percentage of test activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A18*	What will this be in 2 years?	☐	☐	☐	☐
A19*	At this moment, what is the percentage of software packets design where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A20*	What will this be in 2 years?	☐	☐	☐	☐
A21*	At this moment, what is the percentage of software conversion activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A22*	What will this be in 2 years?	☐	☐	☐	☐
A23*	At this moment, what is the percentage of IT helpdesk activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A24*	What will this be in 2 years?	☐	☐	☐	☐
A25*	Which percentage of started IT projects is completed successfully?	☐	☐	☐	☐

PART 4/4: IT GOVERNANCE
Open Question 1*: How are IT budgets assigned in the organization?

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Open Question2*: Which strategic IT initiatives are planned for the coming two years?

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		Completely Disagree	Disagree	Agree	Completely Agree
G1*	We do have SLAs for all the IT activities we are outsourcing, this assures that the service provider takes care of the capacity and adjusts it whenever necessary.	☐	☐	☐	☐
G2*	Decision-making concerning the purchasing of technology is aimed at minimizing the TCO (total cost of ownership).	☐	☐	☐	☐
G3	We have a policy concerning the quality of data, which clearly stated which systems manipulate which data areas en who own these data areas.	☐	☐	☐	☐
G4*	Our technology-budgets are determined annually and are aligned with our business strategy.	☐	☐	☐	☐
G5*	Prime IT-priorities are determined by the business unit/division.	☐	☐	☐	☐
G6*	We monitor and report about the degree to which appointed SLAs are met.	☐	☐	☐	☐
G7*	Outsourcing of IT activities abroad is one of the top priorities of the board of directors.	☐	☐	☐	☐
G8*	We do have strategic technology and business partners that are actively engaged in the design, development en improvement of our IT-services.	☐	☐	☐	☐
G9*	Our applications have clearly identified owners and sponsors from the business.	☐	☐	☐	☐

		Completely Disagree	Disagree	Agree	Completely Agree
G10*	Candidate-projects are only started when they are grounded in a business case that satisfies measurable criteria (i.e. ROI, TCO).	☐	☐	☐	☐
G11*	We manage projects like a portfolio of initiatives. This portfolio is balanced in terms of high and low risk projects. Projects are started and stopped depending on business opportunities.	☐	☐	☐	☐
G12*	New IT concept will be introduced as a result of a defined strategy and planning (plan, pilot, roll out)	☐	☐	☐	☐
G13*	Our IT planning process is an internal affair of the IT-department, annually executed and aimed at producing a list of strategic projects for the coming year.	☐	☐	☐	☐
G14*	We have SLAs with our internal business departments as well as with our suppliers.	☐	☐	☐	☐
G15*	Our project estimations are compared to the actual figures in order to measure productivity and control risks.	☐	☐	☐	☐
G16*	We have a clearly visible organ (i.e. IT-commission or steering committee) which coordinates all IT activities in the organization.	☐	☐	☐	☐
G17*	Our IT organization is predominately an integrator of external services and not a service provider.	☐	☐	☐	☐
G18*	Our organization has multiple years of experience with large scale offshore outsourcing of IT activities.	☐	☐	☐	☐
G19*	Our estimation method compares the costs of external options to development by the organization itself.	☐	☐	☐	☐
G20*	From the business perspective, decreasing costs is the most important job for the IT department.	☐	☐	☐	☐
G21*	We are actively looking for new concept that might be able to replace current IT business models.	☐	☐	☐	☐

Appendix B: Offshore readiness matrix areas

Four areas are distinguished in the Offshore Readiness matrix. The implications of being in a certain area are discussed below.

Offshore Ready: Organizations which are located in this area will in general achieve positive results when moving IT work abroad. Probably they already do so or they will do it in a while since they both have the readiness and mindset to conduct IT work offshore.

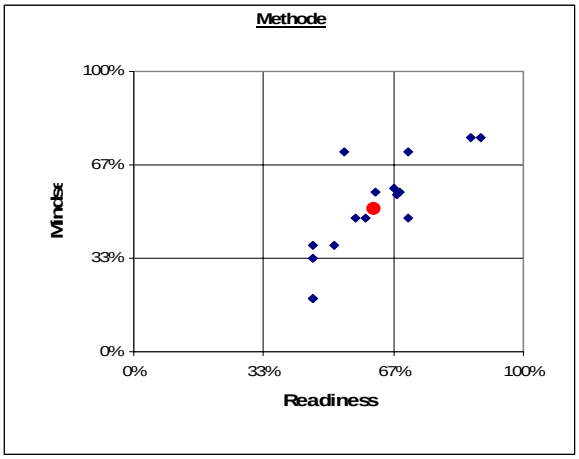
Offshore Potential: Organizations which are in this area either have an average readiness and mindset or a low readiness and high mindset. Success depends upon the organizational circumstances of the offshore IT project. Organizations in this area can achieve the offshore ready area if they put some effort in getting there in order to largely reap the benefits of offshoring.

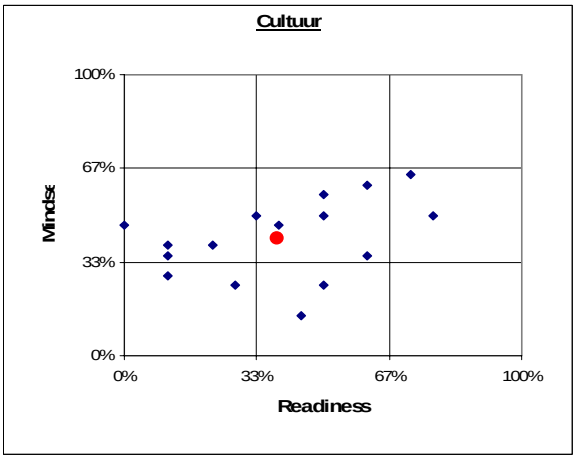
Offshore unlikely: an organization which is situated in the offshore unlikely area could essentially use offshoring. However, it is not aiming for offshoring for whatever reason (e.g. because IT is designated as strategic important and the organization does not want to move it offshore). It is not to be expected that the financial institution would use IT offshoring in the next couple of years, especially because they do not have the mindset for offshoring.

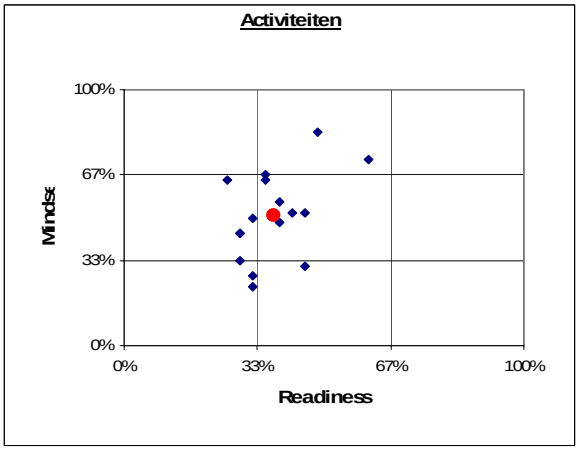
Do not offshore: Organizations located in this area can better make some improvements before moving its IT operations offshore because it would probably turn into a disaster. These improvements can be made at any of the five success factors. The offshore potential area can be reached by severely increasing the mindset. This can happen if the board of directors starts paying attention to offshoring. The offshore ready area can a lot more easily be reached from here.

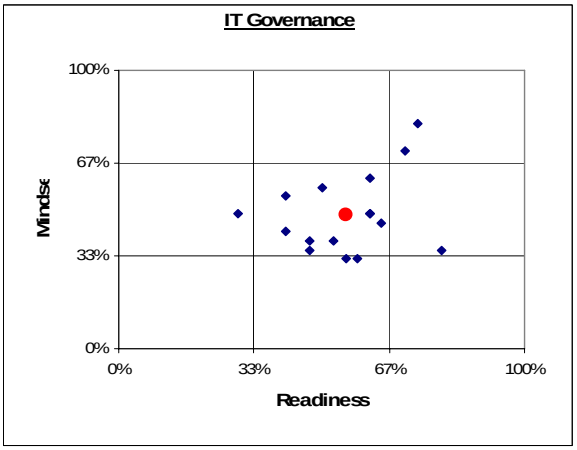
Appendix C: Matrices ORA1

The matrices for each success factor of ORA1 are shown below. The red dot represents the average while the blue dots represent a single financial institution.









Appendix D: Questionnaire assessment ORA2

This appendix contains the questionnaire as used during the interviews for the organizational assessment. This one is a translation from the original questionnaire which was in Dutch. An asterisk (*) behind the question number means that the questions also appeared in ORA1.

Yellowtail Offshore readiness assessment 2006

How successful will you outsource activities abroad? And what are your experiences regarding outsourcing abroad?

Company Name	
Department Name	
Interviewee Name	
Job role	
Phone Number	
Email Address	
Date	

All answers will be treated confidentially

For more information please consult:

Jeroen Oortwijn (joortwijn@yellowtail.nl 06 – 2461 8203)
Robert Harreman (rharreman@yellowtail.nl 06 – 2298 2291)
Jeroen de Groot (jdegroot@yellowtail.nl 06 – 5179 1757)

Part 1/5: METHOD

Open Question 1*: Which method is used right now (in theory) within the IT organization and what percentage of projects are actually using this method?

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Open Question 2*: What is the common opinion within the organization regarding the relation between a standard method and success of IT-projects?

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	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
M1*	Our IT-processes are executed in a standard way by means of internal and external people and resources.	☐	☐	☐	☐
M2*	We have a clearly defined architecture which describes the principles and standards for applications, information and infrastructure.	☐	☐	☐	☐
M3*	Our project managers are certified in the same project management methods (e.g. DSDM, Prince2 or RUP).	☐	☐	☐	☐
M4*	There is a strong and positive relation between working by means of a structured approach and the predictability and success of a project.	☐	☐	☐	☐
M5*	We implemented component based applications (i.e. we successfully deployed applications based on CORBA, J2EE or Microsoft COM/COM+/.NET)	☐	☐	☐	☐
M6*	We have a consistent set of metrics that is collected during the project execution. This results in changes at our IT project approach.	☐	☐	☐	☐
M7*	We did define and document an application architecture that includes companywide application principles and standards. This prescribes the relationship between applications and processes in the company.	☐	☐	☐	☐
M8	Actually using this application architecture is enforced.	☐	☐	☐	☐
M9*	We recognize different scenarios for projects that come with significant risks.	☐	☐	☐	☐
M10*	We consequently use an iterative system development method in our projects.	☐	☐	☐	☐
M11*	We use automated tools in order to test applications. (E.g. performance and regression testing)	☐	☐	☐	☐
M12*	We deliver IT applications that systematically meet the expected performance level.	☐	☐	☐	☐

	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
M13*	We have a solid and readily available set of standard tools that support all stages of application development.	☐	☐	☐	☐
M14*	Systems, infrastructure and maintenance organization are structured in order to be able to support fast changes in functional, capacity and service requirements.	☐	☐	☐	☐
M15*	The method we are using supports communication processes between remote teams.	☐	☐	☐	☐
M16	There are no complaints about the IT infrastructure within projects. (e.g. slow/not accessible network)	☐	☐	☐	☐
M17	Design for reuse is always taken as a requirement during the design of new applications.	☐	☐	☐	☐
M18	The method clearly states how suppliers need to be managed.	☐	☐	☐	☐
M19	The acceptation criteria are set before the development starts.	☐	☐	☐	☐
M20	Which communication methods are heavily used in the organization? **O:** MSN **O:** Skype **O:** Videoconferencing	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐	☐ ☐ ☐

Part 2/5: CULTURE

Open Question 1*: Which cultural elements of the organization will contribute to outsourcing of IT activities abroad, in your opinion?

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Open Question 2*: Which cultural elements of the organization will hamper outsourcing of IT activities abroad, in your opinion?

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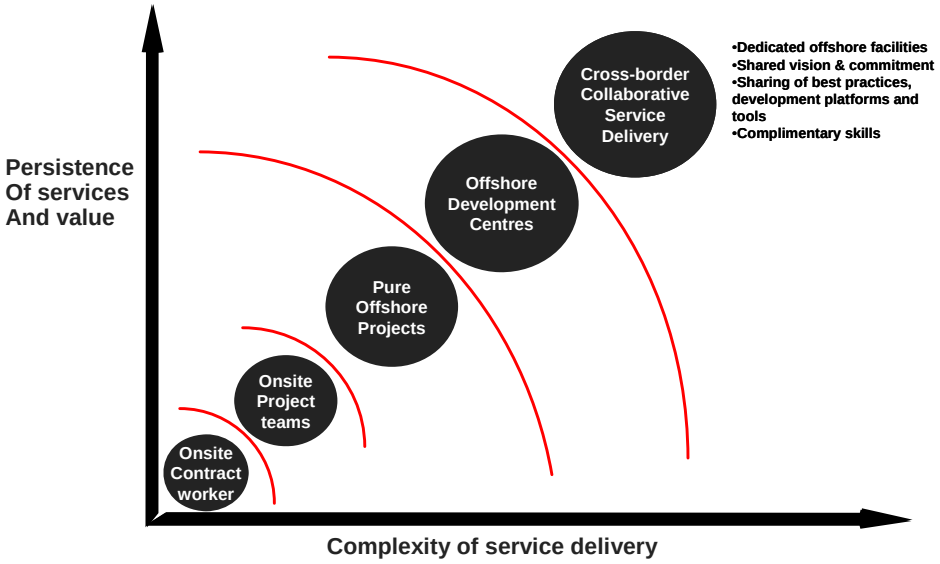
	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
C1*	We truly evaluate external service as an alternative to our internal business services (e.g. wage administration, web hosting, cleaning)	☐	☐	☐	☐
C2*	We cooperate with our suppliers and clients when implementing inter-organizational solutions.	☐	☐	☐	☐
C3*	Our application owners manage each application like a product manager. Many applications are accessible to both internal and external parties.	☐	☐	☐	☐
C4*	Work is carried out successfully by means of a particular appointment via Service Level Agreements (SLA)	☐	☐	☐	☐
C5*	There exists an informal circuit wherein deals are made.	☐	☐	☐	☐
C6	The formal circuit slows down the decision process.	☐	☐	☐	☐
C7*	The end-user organization is able to judge IT products on predetermined guidelines, SLAs and specifications.	☐	☐	☐	☐
C8*	The user organization is used to specifications which are frozen after the design stage. The possibilities to change the functionality later on are rather limited.	☐	☐	☐	☐
C9*	The user organization accepts iterative releasing (time to market preferred over complete functionality) as an accepted way of taking system in production.	☐	☐	☐	☐
C10*	User specification is currently set up in English.	☐	☐	☐	☐
C11*	The user organization is using English documents at the moment.	☐	☐	☐	☐
C12	Our employees master English.	☐	☐	☐	☐

	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
C13*	We buy software packets and implement them without committing any change.	☐	☐	☐	☐
C14*	All solutions are constantly reassessed and adapted to the changing company requirements and values to the business.	☐	☐	☐	☐
C15	People are well aware of each others' activities within projects.	☐	☐	☐	☐
C16	There is an organized and actually used track and trace system which easily shows the status of project issues	☐	☐	☐	☐
C17	Project employees have their own responsibilities in setting up their detailed planning.	☐	☐	☐	☐
C18	Regularly personal contact between the different disciplines of a project contributes to the project success.	☐	☐	☐	☐
C19	Explicit attention is paid to face to face meetings in projects with dispersed teams.	☐	☐	☐	☐
C20	Our employees are flexible, they do not bother to work flexible hours whenever necessary.	☐	☐	☐	☐
C21	We have clear guidelines concerning the communication. For example about style and frequency which take cultural differences in account.	☐	☐	☐	☐
C22	We pay a lot of attention to the creation and maintenance of a fine team atmosphere.	☐	☐	☐	☐

Part 3/5: IT ACTIVITIES

Open Questions 1*: On the basis of which organizational model does your organization outsource IT-activities? What is your view to this vision?



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Open Question 2*: Which IT-activities are scheduled for outsourcing the coming two years? Which motive is the basis of this planning?

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	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
A1	How many big offshore projects are conducted by your organization? (0,1-5,6-20,>20).	☐	☐	☐	☐
A2*	Custom made software activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A3*	Software maintenance activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A4*	IT helpdesk and support activities are of strategic importance to the organization, costs are of minor importance with that.	☐	☐	☐	☐
A5*	We are looking for suppliers that can later on execute the company processes belonging to the software solutions they develop and implement.	☐	☐	☐	☐
A6*	Better quality is the most important reason for outsourcing, we are looking for suppliers that deliver better quality than we can make ourselves.	☐	☐	☐	☐
A7*	Our applications computerize clearly defined company processes that do not often cross functional borders.	☐	☐	☐	☐
A8*	We outsource almost all infrastructure components in accordance to our companywide architecture.	☐	☐	☐	☐
A9*	Our most important systems are in continuous transition because of the changes necessary to the business.	☐	☐	☐	☐
A10	A lot of development concerns (old) legacy systems.	☐	☐	☐	☐
A11	Our IT-applications are well documented.	☐	☐	☐	☐
A12	Our IT-applications are modular build.	☐	☐	☐	☐

		<25%	25%-50%	50%-75%	> 75%
A13*	At this moment, what is the percentage of custom made software where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A14*	What will this be in 2 years?	☐	☐	☐	☐
A15*	At this moment, what is the percentage of software maintenance activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A16*	What will this be in 2 years?	☐	☐	☐	☐
A17*	At this moment, what is the percentage of test activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A18*	What will this be in 2 years?	☐	☐	☐	☐
A19*	At this moment, what is the percentage of software packets design where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A20*	What will this be in 2 years?	☐	☐	☐	☐
A21*	At this moment, what is the percentage of software conversion activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A22*	What will this be in 2 years?	☐	☐	☐	☐
A23*	At this moment, what is the percentage of IT helpdesk activities where the delivery responsibility is transferred to the supplier?	☐	☐	☐	☐
A24*	What will this be in 2 years?	☐	☐	☐	☐
A25*	Which percentage of started IT projects is completed successfully?	☐	☐	☐	☐

Part 4/5: IT GOVERNANCE
Open Question 1*: How are IT budgets assigned in the organization?

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Open Question 2*: Which strategic IT initiatives are scheduled for the coming two years?

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Open Question 3: On which grounds does your organization decide whether or not to outsource/offshore a certain project?

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Open Question 4: Which strategic questions are important with respect to IT offshoring in your opinion?

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	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
G1*	We have SLAs for all the IT activities we are outsourcing, this assures that the service provider takes care of the capacity and adjusts it whenever necessary.	☐	☐	☐	☐
G2*	Decision-making concerning purchasing of technology is aimed at minimizing the TCO (total cost of ownership).	☐	☐	☐	☐
G3*	Our technology-budgets are determined annually and are aligned with our business strategy.	☐	☐	☐	☐
G4*	Primary IT-priorities are determined by the business unit/division.	☐	☐	☐	☐
G5*	We monitor and report about the degree to which appointed SLAs are met.	☐	☐	☐	☐
G6*	Outsourcing of IT activities abroad is one of the top priorities of the board of directors.	☐	☐	☐	☐
G7*	We have strategic technology and business partners that are actively engaged in the design, development en improvement of our IT-services.	☐	☐	☐	☐
G8*	Our applications have clearly identified owners and sponsors from the business.	☐	☐	☐	☐
G9*	Candidate-projects are only started when they are grounded in a business case that satisfies measurable criteria (i.e. ROI).	☐	☐	☐	☐
G10*	We manage projects like a portfolio of initiatives. This portfolio is balanced in terms of high and low risk projects. Projects are started and stopped depending on business opportunities.	☐	☐	☐	☐
G11*	New IT concept will be introduced as a result of a defined strategy and planning (plan, pilot, roll out)	☐	☐	☐	☐
G12*	Our IT planning process is an internal affair of the IT-department, annually executed and aimed at producing a list of strategic projects for the coming year.	☐	☐	☐	☐
G13*	We have SLAs with our internal business departments as well as with our suppliers.	☐	☐	☐	☐
G14*	Our project estimations are compared to the actual figures in order to measure productivity and control risks.	☐	☐	☐	☐
G15*	We have a clearly visible organ (i.e. IT-commission or steering committee) which coordinates all IT activities in the organization.	☐	☐	☐	☐
G16*	Our IT organization is predominately an integrator of external services and not a service provider.	☐	☐	☐	☐
G17*	Our organization has multiple years of experience with large scale offshore outsourcing of IT activities.	☐	☐	☐	☐
G18*	Our budget method compares the costs of external options to development by the organization itself.	☐	☐	☐	☐
G19*	From the business perspective, decreasing costs is the most important job of the IT department.	☐	☐	☐	☐

	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
G20*	We are actively looking for new concept that might be able to replace current IT business models.	☐	☐	☐	☐
G21*	A formal risk assessment is carried out as a first step at each important project.	☐	☐	☐	☐
G22*	We have defined a clear risk management process for projects.	☐	☐	☐	☐
G23*	Applications which are critical to the business are financed based on a model which also charges the extra costs incurred later on (e.g. maintenance)	☐	☐	☐	☐
G24*	We consistently use a well defined purchasing policy regarding IT-activities.	☐	☐	☐	☐
G25	The high quality requirements of the software make the time to market too long.	☐	☐	☐	☐
G26*	We carry out projects that come with high risk and high potential, knowing in advance that some will fail.	☐	☐	☐	☐
G27	We set realistic goals before we initiate an offshore project.	☐	☐	☐	☐
G28	We gained a lot of experience during previous outsourcing and offshore projects which is readily applicable to new projects.	☐	☐	☐	☐

Part 5/5: KNOWLEDGE SHARING

	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
K1	There are yet systems in the organization which collect business knowledge (Knowledge Management System)	☐	☐	☐	☐
K2	The knowledge management systems are heavily used and readily accessible.	☐	☐	☐	☐
K3	The organization pushes employees to learn about new technologies (e.g. by offering education)	☐	☐	☐	☐
K4	Managers are well informed by the project team members. Hence they feel what is going on and they use this while managing (managing by intuition)	☐	☐	☐	☐
K5	Project teams classify knowledge sharing as of major importance, sometimes workshops about knowledge sharing are given.	☐	☐	☐	☐
K6	We can only cooperate effectively whenever the whole team is together at the same place.	☐	☐	☐	☐
K7	A lot of knowledge is required in order to be able to operate well in our business, this makes it hard to let a third party do the job.	☐	☐	☐	☐
K8	A lot of data within our company is confidential, this makes it hard to let a third party do the job.	☐	☐	☐	☐
K9	We will never disclose our infrastructure to a third party.	☐	☐	☐	☐
K10	We try to document important knowledge which is only present at a couple of employees. So other people can also get acquainted with the knowledge.	☐	☐	☐	☐
K11	We teach somebody whenever he possesses too less knowledge.	☐	☐	☐	☐
K12	Everybody in the organization knows each others' expertise. They know whom to consult when they have a problem.	☐	☐	☐	☐
K13	Project team members interchange a lot of knowledge.	☐	☐	☐	☐

Appendix E: Rationale behind each question

All questions in the interviews are there for a reason. All these reasons can be found below. The first column of the table shows the number of the question. The second columns states the area to which it belongs and in brackets were it is derived from. The experience from Yellowtail's consultants is meant when Yellowtail is mentioned. The last column shows whether it is a readiness or mindset question. An asterisk (*) behind the question number means that the questions also appeared in ORA1.

Method	**Area**	**Readiness/Mindset**
Open 1*	System Development/Project Management Method (Yellowtail)	Readiness
Open* 2	System Development/Project Management Method (Yellowtail)	Mindset
1*	System Development/Project Management Method (Yellowtail)	Mindset
2*	Architecture (Yellowtail)	Readiness
3*	System Development/Project Management Method (Yellowtail)	Readiness
4*	System Development/Project Management Method (Yellowtail)	Mindset
5*	Facilitating reuse (Kotlarsky)	Readiness
6*	System Development/Project Management Method (Yellowtail)	Readiness
7*	Architecture (Yellowtail)	Readiness
8	Architecture (Yellowtail)	Readiness
9*	System Development/Project Management Method (Yellowtail)	Mindset
10*	System Development/Project Management Method (Yellowtail)	Readiness
11*	Tools and Technologies (Kotlarsky)	Mindset
12*	System Development/Project Management Method (Yellowtail)	Readiness
13*	Tools and Technologies (Kotlarsky)	Readiness
14*	Architecture (Yellowtail)	Mindset
15*	System Development/Project Management Method (Yellowtail)	Mindset
16	Tools and Technologies (Kotlarsky)	Readiness
17	Design for reuse (Kotlarsky)	Mindset
18	Managing vendors (Kotlarsky)	Mindset
19	System Development/Project Management Method (Yellowtail)	Readiness
20a	Tools and Technologies (Kotlarsky)	Readiness
20b	Tools and Technologies (Kotlarsky)	Readiness
20c	Tools and Technologies (Kotlarsky)	Readiness

Culture	**Area**	**Readiness/Mindset**
Open 1*	Multiple (Multiple)	Readiness/Mindset
Open 2*	Multiple (Multiple)	Readiness/Mindset
1*	Increasing awareness (Kotlarsky)	Mindset
2*	Making efficient division of work (Kotlarsky)	Mindset
3*	Increasing reachability (Kotlarsky)	Readiness
4*	Designing systematic communication (Kotlarsky)	Readiness

5*	Facilitating interaction (Kotlarsky)	Readiness
6	Company Culture (Yellowtail)	Readiness
7*	Designing systematic communication (Kotlarsky)	Readiness
8*	Making efficient division of work (Kotlarsky)	Mindset
9*	Making efficient division of work (Kotlarsky)	Mindset
10*	Facilitating interaction (Kotlarsky)	Readiness
11*	Facilitating interaction (Kotlarsky)	Readiness
12	Facilitating cross-pollination (Kotlarsky)	Readiness
13*	Structuration (Walsham)	Mindset
14*	Structuration (Walsham)	Mindset
15	Increasing reachability (Kotlarsky)	Mindset
16	Facilitating tracking (Kotlarsky)	Readiness
17	Enabling flexible PM techniques (Kotlarsky)	Mindset
18	Building relationships (Kotlarsky)	Mindset
19	Building relationships (Kotlarsky)	Mindset
20	Enabling working flexibility (Kotlarsky)	Mindset
21	Designing efficient communication (Kotlarsky)	Readiness
22	Creating and maintaining team atmosphere (Kotlarsky)	Mindset

IT Activities	**Area**	**Readiness/Mindset**
Open 1*	SITO model (Carmel)	Readiness/Mindset
Open 2*	Project preparation (Willcocks)	Mindset
1	Offshore project evaluation (Willcocks)	Readiness
2*	Importance to business (Willcocks)	Mindset
3*	Importance to business (Willcocks)	Mindset
4*	Importance to business (Willcocks)	Mindset
5*	Project preparation (Willcocks)	Mindset
6*	Project preparation (Willcocks)	Mindset
7*	Offshore suitability (Yellowtail)	Readiness
8*	Project preparation (Willcocks)	Mindset
9*	Offshore suitability (Yellowtail)	Readiness
10	Offshore suitability (Yellowtail)	Readiness
11	Offshore suitability (Yellowtail)	Readiness
12	Offshore suitability (Yellowtail)	Readiness
13*	Delivery responsibility (Yellowtail)	Readiness
14*	Project preparation (Willcocks)	Mindset
15*	Delivery responsibility (Yellowtail)	Readiness
16*	Project preparation (Willcocks)	Mindset
17*	Delivery responsibility (Yellowtail)	Readiness
18*	Project preparation (Willcocks)	Mindset
19*	Delivery responsibility (Yellowtail)	Readiness
20*	Project preparation (Willcocks)	Mindset
21*	Delivery responsibility (Yellowtail)	Readiness
22*	Project preparation (Willcocks)	Mindset
23*	Delivery responsibility (Yellowtail)	Readiness
24*	Project preparation (Willcocks)	Mindset
25*	Success (Yellowtail)	Readiness

IT Governance	**Area**	**Readiness/Mindset**
Open 1*	Financial management (Yellowtail)	Readiness

Open 2*	Project preparation (Willcocks)	Mindset
Open 3	Project preparation (Willcocks)	Mindset
Open 4	Project preparation (Willcocks)	Mindset
1*	Contractual arrangements (Yellowtail)	Readiness
2*	Financial management (Yellowtail)	Mindset
3*	Financial management (Yellowtail)	Mindset
4*	Project preparation (Willcocks)	Mindset
5*	Project evaluation (Willcocks)	Readiness
6*	Project preparation (Willcocks)	Mindset
7*	Making efficient division of work (Kotlarsky)	Readiness
8*	Business support (Yellowtail)	Readiness
9*	Project preparation (Willcocks)	Readiness
10*	Risk management (Aron)	Readiness
11*	Project preparation (Willcocks)	Mindset
12*	Project preparation (Willcocks)	Mindset
13*	Contractual arrangements (Yellowtail)	Readiness
14*	Risk management (Aron)	Mindset
15*	Project management (Yellowtail)	Readiness
16*	Making efficient division of work (Kotlarsky)	Mindset
17*	Offshore project evaluation (Willcocks)	Readiness
18*	Project preparation (Willcocks)	Readiness
19*	Project preparation (Willcocks)	Mindset
20*	Project evaluation (Willcocks)	Mindset
21*	Risk management (Aron)	Readiness
22*	Risk management (Aron)	Readiness
23*	Financial management (Yellowtail)	Mindset
24*	Project preparation (Willcocks)	Readiness
25	Project preparation (Willcocks)	Mindset
26*	Risk management (Yellowtail)	Mindset
27	Project preparation (Willcocks)	Mindset
28	Project evaluation (Willcocks)	Mindset

Knowledge Sharing	**Area**	**Readiness/Mindset**
1	Creating transactive memory (Kotlarsky)	Readiness
2	Creating transactive memory (Kotlarsky)	Readiness
3	Learning new technologies (Kotlarsky)	Mindset
4	Managing by intuition (Kotlarsky)	Mindset
5	Creating transactive memory (Kotlarsky)	Mindset
6	Mode of cooperation (Yellowtail)	Mindset
7	Required knowledge (Yellowtail)	Readiness
8	Confidentiality (Yellowtail)	Readiness
9	Confidentiality (Yellowtail)	Readiness
10	Expanding collective knowledge (Kotlarsky)	Readiness
11	Increasing reachability (Kotlarsky)	Mindset
12	Creating transactive memory (Kotlarsky)	Mindset
13	Expanding collective knowledge (Kotlarsky)	Mindset

Appendix F: ORA2 Score Sheet

The tables given beneath show how many points are awarded to each possible answer at all the closed questions. Also it shows whether a question belongs to the readiness or mindset dimension. The final score can be calculated by adding the points per dimension for each success factor. The percentages as used in the matrices are this number of points divided by maximum reachable number of points times 100 percent. The final score is the weighted average over all individual success factors. Note that no points are awarded to the closed questions. An asterisk (*) behind the question number means that the questions also appeared in ORA1.

Method

Question #	Readiness/Mindset	Disagree	More Disagree	More Agree	Agree
1*	Mindset	0	0	2	3
2*	Readiness	0	0	2	3
3*	Readiness	0	0	2	3
4*	Mindset	1	0	2	3
5*	Readiness	0	0	1	1
6*	Readiness	0	0	2	3
7*	Readiness	0	0	2	3
8	Readiness	0	0	2	3
9*	Mindset	0	0	2	3
10*	Readiness	1	1	2	2
11*	Mindset	0	0	1	3
12*	Readiness	0	1	3	3
13*	Readiness	0	0	2	3
14*	Mindset	0	0	3	3
15*	Mindset	0	0	2	3
16	Readiness	0	0	2	3
17	Mindset	0	0	2	3
18	Mindset	0	0	2	3
19	Readiness	0	0	2	3
20A	Readiness	0	0	2	3
20B	Readiness	0	0	2	3
20C	Readiness	0	0	2	3

Culture

Question #	Readiness/Mindset	Disagree	More Disagree	More Agree	Agree
1*	Mindset	0	0	3	3
2*	Mindset	0	0	2	3
3*	Readiness	0	0	2	2
4*	Readiness	0	0	2	3

5*	Readiness	3	2	0	0
6	Readiness	3	2	0	0
7*	Readiness	-2	-1	2	3
8*	Mindset	-1	0	2	3
9*	Mindset	0	0	2	2
10*	Readiness	0	0	3	3
11*	Readiness	0	0	3	3
12	Readiness	0	0	2	3
13*	Mindset	0	1	2	3
14*	Mindset	3	2	0	0
15	Mindset	0	0	2	3
16	Readiness	0	0	2	3
17	Mindset	0	0	2	3
18	Mindset	0	0	2	3
19	Mindset	0	0	2	3
20	Mindset	0	0	2	3
21	Readiness	0	0	2	3
22	Mindset	0	0	2	3

IT activities

Question #	**Readiness/Mindset**	**Disagree**	**More Disagree**	**More Agree**	**Agree**
1	Readiness	0	1	2	3
2*	Mindset	3	2	1	0
3*	Mindset	3	2	1	0
4*	Mindset	3	2	1	0
5*	Mindset	0	0	1	2
6*	Readiness	0	0	2	3
7*	Mindset	0	0	2	3
8*	Mindset	0	0	3	3
9*	Mindset	3	2	1	1
10	Readiness	3	2	0	0
11	Readiness	0	0	2	3
12	Readiness	0	0	2	3
13*	Readiness	1	3	4	4
14*	Mindset	1	3	4	4
15*	Readiness	1	3	4	4
16*	Mindset	1	3	4	4
17*	Readiness	1	3	4	4
18*	Mindset	1	3	4	4
19*	Readiness	0	2	4	4
20*	Mindset	0	2	4	4

21*	Readiness	0	2	3	4
22*	Mindset	0	2	3	4
23*	Readiness	0	2	3	4
24*	Mindset	0	2	3	4
25*	Readiness	0	2	3	4

IT governance

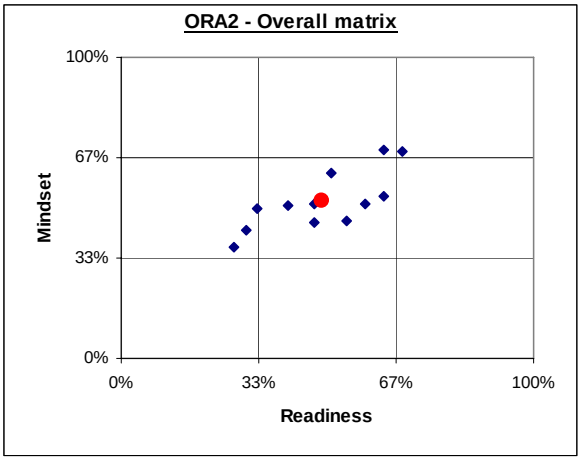
Question #	Readiness/Mindset	Disagree	More Disagree	More Agree	Agree
1*	Readiness	0	0	2	3
2*	Mindset	0	0	2	3
3*	Mindset	0	0	2	3
4*	Mindset	0	0	1	3
5*	Readiness	0	0	2	3
6*	Mindset	0	0	3	4
7*	Readiness	0	0	3	3
8*	Readiness	0	0	1	3
9*	Readiness	0	0	2	3
10*	Readiness	0	0	2	3
11*	Mindset	0	1	2	3
12*	Mindset	3	1	0	0
13*	Readiness	0	1	3	3
14*	Mindset	0	0	2	3
15*	Readiness	0	0	2	3
16*	Mindset	0	1	3	3
17*	Readiness	0	1	3	4
18*	Readiness	0	0	2	3
19*	Mindset	0	0	3	3
20*	Mindset	0	0	2	3
21*	Readiness	0	0	1	3
22*	Readiness	0	0	2	3
23*	Readiness	0	0	1	2
24*	Readiness	0	0	2	3
25	Mindset	3	2	0	0
26*	Mindset	0	0	2	3
27	Mindset	0	0	2	3
28	Mindset	0	0	2	3

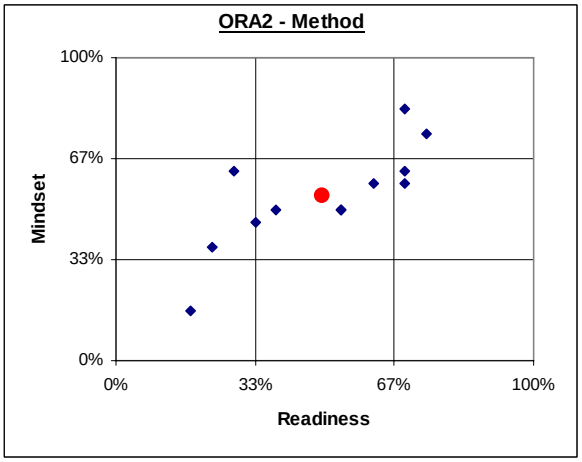
Knowledge Sharing

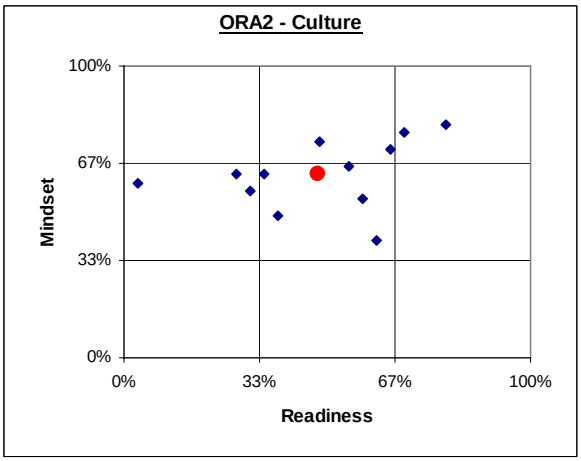
Question #	Readiness/Mindset	Disagree	More Disagree	More Agree	Agree
1	Readiness	0	0	2	3
2	Readiness	0	0	2	3

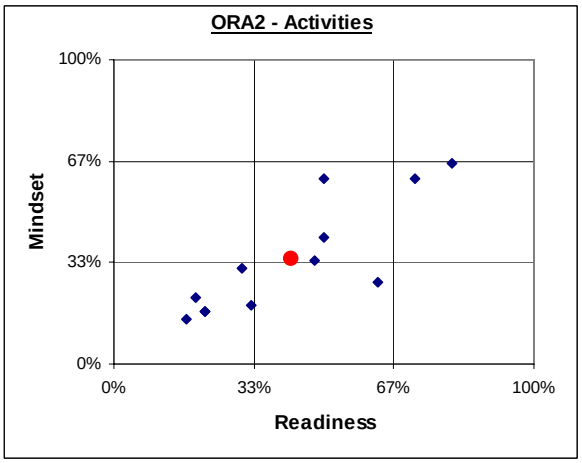
3	Mindset	0	0	2	3
4	Mindset	0	0	2	3
5	Mindset	0	0	2	3
6	Mindset	3	2	0	0
7	Readiness	2	1	0	0
8	Readiness	2	1	0	0
9	Readiness	2	1	0	0
10	Readiness	0	0	2	3
11	Mindset	0	0	2	3
12	Mindset	0	0	2	3
13	Mindset	0	0	2	3

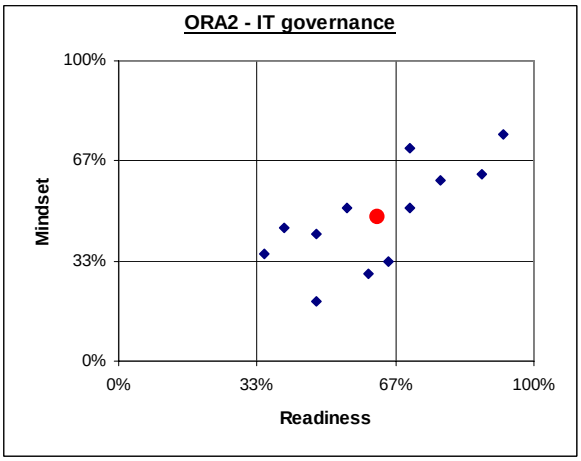
Appendix G: ORA2 result matrices

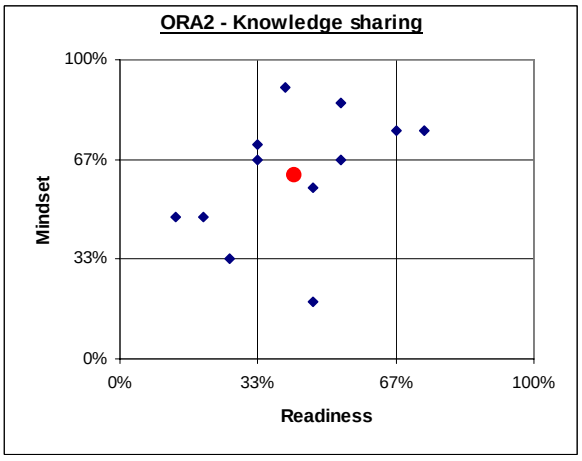












Appendix H: Questionnaire case studies ORA2

This appendix contains the questionnaire as used during the interviews for the case studies. This one is a translation from the original questionnaire which was in Dutch.

Yellowtail Offshore Readiness Assessment 2006
Case Studies

Company Name	
Department Name	
Interviewee Name	
Function description	
Phone Number	
Email address	
Date	

All answers will be treated confidentially

For more information please consult:

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Jeroen de Groot (jdegroot@yellowtail.nl 06 – 5179 1757)

PART 1/6: General

Open Question 1: Can you describe the project briefly in terms of business case, functionality, goals and offshore location?

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Open Question 2: Why is decided to conduct this project offshore?

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Open Question3: Do you think that this project is successful?

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Open Question 4: How successful would you classify this project in terms of quality, completion time and cost savings compared to non offshore projects?

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Open Question 5: What is going well and what is going wrong in this project in your opinion?

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Open Question 6: What can be done better in this offshore project and what would you do differently next time?

……

……

	All possible answers in order from disagree to agree are: disagree, more disagree than agree, more agree than disagree, agree. The 2 in the middle are abbreviated as more disagree and more agree respectively.	Disagree	More Disagree	More Agree	Agree
1	The price was an important objective to offshore?	☐	☐	☐	☐
2	The quality was an important objective to offshore?	☐	☐	☐	☐
3	This is a pilot project, we mainly execute it in order to learn from it.	☐	☐	☐	☐
4	How many big offshore projects did your organization conduct? 0, 1-5, 6-20, >20.	☐	☐	☐	☐

PART 2/6: METHOD

Open Question 1: Which method is used in this offshore project (cascading vs. iterative) and how does this contribute to success?

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Open Question 2: Is the method strictly applied?

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Open Question 3: Is the method adapted to offshoring?

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Open Question 4: What does the organization structure of this project look like?

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Open Question 5: How is the communication between on and offshore designed and did this work out well or are there any possible improvements?

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Open Question 6: Which bottlenecks can be identified in the communication with the offshore party?

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Open Question 7: Are there any requirements concerning the documentation, for example language or form and did this work out well or are there any possible improvements?

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Open Question 8: What was the level of the documentation throughout the project, was everything well documented or was appropriate documentation lacking? Was a lot of email necessary later on in order to get everything completely straight?

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Open Question 9: How quickly were issues resolved and how does this relate compared to onshore projects?

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Open Question 10: Is the functionality completely fixed in advance or is a rather incremental approach used? What is the experience related to this way of working?

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Open Question 11: Does the method provide any means directed at efficient and timely management of changes? Where did this appear from?

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Open Question 12: Are the goals articulated in written before the start of the project and are these goals realistic?

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Open Question 13: How does the project deal with different releases (versions, prototyping)?

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Open Question 14: Are the test cases and acceptance criteria set up during project design? What is the experience related to this way of working?

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Open Question 15: How is testing arranged in case applications cooperate with one another?

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Open Question 16: Are any regression tests carried out, if so, does it happen offshore and/or automatically?

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Open Question 17: Are offshore testers supported by onshore business experts and is this necessary?

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Open Question 18: Is the onshore way of working adapted to the CMM level (Mostly 5 in India) of the offshore supplier and did this result in any problems?

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Open Question 19: Which tools were used in order to specify the requirements?

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Open Question 20: Which tools were used for version management?

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Open Question 21: Which tools are used in the development process?

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Open Question 22: Which tools are used for testing?

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Closed Question 1: By which means does communication take place?
O: MSN
O: Skype
O: Phone
O: Mail
O: Video conferencing
O: Webcams
O: Other ……

PART 3/6: CULTURE

Open Question 1: How were the differences in culture perceived?

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Open Question 2: What experiences were gained regarding time differences?

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Open Question 3: According to your opinion, did your company cooperate well with the offshore supplier?

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Open Question 4: Did the organization cooperate with the offshore party previously and/or are they planning to cooperate with them in the future?

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Open Question 5: Is the company characterized by a formal or informal culture and where does this appear from? How does this contribute to offshore success?

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Open Question 6: Are project members briefed in advance about the offshore partner, their local culture and which problems are expected to come up?

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Open Question 7: Were the on and offshore party easily reachable for each other?

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Open Question 8: Are time difference perceived as an advantage or disadvantage and why?

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Open Question 9: Are there any measures taken in order to overcome time difference, for example flexibility or travelling?

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Open Question 10: Is there a lot of supporting communication required during development (functional, technical or organizational)? Can this be done more efficiently?

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Open Question 11: What about the end users, were they well involved throughout the project and how is this assured?

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Open Question 12: Is there any resistance within the organizations and how is this noticed?

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Open Question 13: How much confidence is there with respect to the offshore supplier and where is it based upon?

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Open Question 14: Is any attention paid to face to face meeting of each other before the project starts?

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Open Question 15: Are there certain procedures governing the communication with the offshore party, for example templates, policies e.g.?

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……

Open Question 16: After all, was working with a foreign offshore party from a different culture better or worse than you had expected in advance?

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PART 4/6: IT ACTIVITIES

Open Question 1: Of what importance are the activities that are offshored (strategic, tactical or operational)?

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Open Question 2: How complex are the projects which are offshored, for example concerning their functionality or interfaces with other systems?

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Open Question 3: How many parties are involved in the offshore project (a few, average, a lot)? Is this the right amount?

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Open Question 4: Do most offshore projects concern new developments or adaptations to existing systems? Does this matter with respect to the offshore decision?

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……

Open Question 5: What are the activities/responsibilities of the offshore party?

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……

Open Question 6: Do you think this project is well suited to offshoring?

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PART 5/6: IT GOVERNANCE

Open Question 1: Why is the incumbent offshore supplier selected?

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Open Question 2: What did the selection process look like?

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Open Question 3: How is the budget of this project determined?

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Open Question 4: Did the organization define a strategy which determines whether to offshore an activity?

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Open Question 5: What is perceived as a good duration for an offshore project, is there an upper or lower limit?

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Open Question 6: What is a good size for an offshore project, is there an upper or lower limit?

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Open Question 7: What are seen as the biggest risk when moving offshore (language, culture, distance, communication, internal resistance in organization)?

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Open Question 8: How are the responsibilities and legal issues of system development arranged, for example are SLAs or other kinds of contracts used and why is this agreement chosen? Is this a good setup?

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Open Question 9: Did difference in law have any influence on project execution?

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Open Question 10 How are results evaluated, is it connected to the goals stated in advance?

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Open Question 11: In what way did the gained experience influence the organization?

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PART 6/6: KNOWLEDGE SHARING

Open Question 1: Does the offshore supplier always possess enough business knowledge in order to properly execute the project?

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Open Question 2: Are there any systems in the organization that support sharing of business knowledge?

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Open Question 3: Are there any problems due to differences in knowledge, if so how is dealt with it?

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Open Question 4: Does the organization purposely search for offshore parties which possess appropriate business knowledge?

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Open Question 5: How important is business knowledge at the offshore supplier according to the organization?

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Open Question 6: How is business knowledge transferred to the offshore party (e.g. written documentation, face to face contact)?

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Open Question 7: Is your organization set to easily share knowledge with an offshore supplier (e.g. good documentation available, employees who are eager to share knowledge)?

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……

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Open Question 8: Is confidentiality of knowledge a problem during an offshore project?

……

……

……

Appendix I: Key offshore legal issues

This appendix will discuss some key legislation regarding offshoring (Carmel, 2005, 112-129). It is only meant to provide a quick overview of the main legislation and does not attempt to cover all applicable laws.

Intellectual Property (IP) protection
In general it is hard to properly protect IP rights in offshoring arrangements. Software written abroad may be subject to different laws. A lot of major offshore destinations like India, Russia and China do not recognize software and business method patents. Rules addressing the ownership of developed technology differ per country as well. In the USA, a customer can rely on a doctrine which makes him the exclusive owner of the developed work. Certain kind of legislation is lacking in the UK. Furthermore it may be hard to determine which rules do apply when projects are crossing borders. In some cases international arbitration may be a better dispute resolution process for international disputes.

Labour and employment rights
Often offshoring and employees dismissal in the onshore country come together. A lot of countries impose stringent firing rules. The US WARN (Worker Adjustment and Retraining Notification) act applies in the USA which requires companies with 100 or more employees to provide a 60-day notice to displaced workers in certain circumstances. The EU has the Acquired Rights Directives which may grant employees the same conditions when they are transferred offshore, severance payments can be mandatory in case of layoffs. In India governmental approval may be necessary in case an organization with over 100 employees wants to fire employees.

Import and export issues
In certain cases laws regarding the import and export of product apply. In the USA, software products with strong encryption capabilities are regulated as weapons by the Ministry of Defence. Appropriate approval needs to be obtained before the software can be transported.

Privacy and data structure
Privacy is becoming a sensitive part in contemporary business. People increasingly care about their personal data and a lot of regulations govern proper use by companies. The Congress of the USA enacted the following three privacy legislations:

- *Gramm-Leach-Bliley Act*: governs personal financial information.
- *Health Insurance Portability and Accountability Act (HIPAA)*: covers health and medical information.
- *Children's Online Privacy Protection Act (COPPA)*: governs information collected from children under the age of 13.

The EU is a leader when it comes to enacting and enforcing privacy regulation. The European Union Data Privacy Directive (95/46/EU) has been implemented in 1998. It applies to business that collects personal data of EU residents. It is very cumbersome to send personal data to countries which are not approved to receive these data. Only a few countries possess terms of approval including Switzerland and Canada. Many popular offshore locations are not present here, examples include India, China, Russia and many others. Permission to transfer personal data to these countries can only be granted by national privacy authorities or individual customer's consent. Well known companies like Microsoft and Telefonica are already fined for violating these laws.

It may even be wise for an organization to go beyond the applicable law and protect privacy issues even more thoroughly. An organization can loose their public trust whenever customers feel their personal data is not well treated. Public trust is really hard to reacquire in case it is lost.

Governmental approval of outsourcing

Both Europe and USA are considering legislation which will limit offshoring. It may be a good idea for organizations to monitor these trends, especially given the rapid developments offshoring is making.

Political regulations can also come into play besides the regulatory laws and regulations. The sanctions imposed by the USA in 1998 against India and Pakistan for nuclear testing are an example of such political measures. Although this embargo did not concern any offshoring practices, it is not uncommon it will happen in the future.

Taxes

As with all international transactions, taxes do also apply to offshoring. Applicable service taxes most be considered to have a complete picture of the cost and potential savings of offshoring. In the USA, a company does not incur any service tax when it provides a service to itself within the same state. However, the service may be subject to service taxes when it is provided from outside the state.

Currency

Offshoring can come with currency risk in case multiple currencies are used in the contract. The organization needs to keep these risks in mind and can use all kinds of instruments if it wants to mitigate or exclude these risks.