

How to develop best practices for outsourcing for Entrepreneurial companies

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'The only fight you lose..is the one you stop fighting' - Rocky Balboa

'The magic..it's all outside your comfort zone' - Frederic Harper

'In a lot of cases..finished is better than perfect' - Anonymous

'Success is..to put it simply..from not working to networking' - Anonymous

'Explore. Dream. Discover.' - Mark Twain

Abstract

This Master Thesis concludes the final semester of my two-year Master of Science in Innovation and Entrepreneurship at the University of Oslo, Norway.

BACKGROUND: With technology bringing the world closer, the relevance of outsourcing has greatly increased in today's world. The understanding of how, what, where, when to outsource is imperative for any company to successfully pursue outsourcing.

OBJECTIVE: The thesis explores outsourcing literature to understand current best practices and compares it with data obtained from entrepreneurial companies using outsourcing to identify what could be the best practices for entrepreneurial and startup companies to outsource successfully. To get an overall picture of the outsourcing process, data is taken from both the client side and the supplier side.

METHOD: The methodology framework used in the thesis is of the case study type. This is an exploratory qualitative case study with an embedded design that takes the outsourcing strategies as a single case and tries to break down the functions within to achieve a stronger output within that case.

RESULTS: Six qualitative interviews were done wherein three were entrepreneurial companies based in Oslo and the other three were outsourcing providers based in Europe and India. The interview questions were grouped based on the literature reviewed and analyzed in parallel for the different companies.

CONCLUSIONS: Summaries of findings for outsourcing are outlined along with expansion areas for further research. The thesis sheds light on culture fit, choosing the right tools and processes, and cost, quality and competency benefits with regards to outsourcing.

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1. Introduction

This section primarily deals with the background for taking up this research topic and the relevance of it. It will define the research question and the hypothesis attached with it. For any research, it is beneficial to have personal motivations and those are mentioned in the section thereafter. Since this research was carried over seventeen weeks, limitations of the study were imperative and they have been charted down. Lastly, this section outlines the structure of the forthcoming topics in this thesis study.

1.1 Background to the Study

In a world where technology is eradicating boundaries and efficiency is becoming the norm for successful companies, outsourcing is evolving rapidly to become a strong contender as a valuable business alternative for any organization. While the need may vary from company to company, from large organizations to small startups are involving themselves in making outsourcing a core component of their operations. Today's world is seeing an intense growth in online communication systems, which businesses and enterprises are increasingly using to shorten boundaries.

As technology is improving, this experience of 'like in person' will only increase, meaning companies can work remotely together and use technology to create products and services more cost efficiently and at a rapid pace. To add to it, the current state of economies worldwide has brought companies in larger nations to seriously consider coherent development alternatives to ensure relevancy in a fast paced globalized world.

With the advent rise of globalization, outsourcing has been a term that has been thrown around quite a lot in the past few years. In fact, Kakabadse (2002) mentions that the last two decades have seen an immense rise in outsourcing - with high price tags attached to contracts, indicating

that outsourcing has been an integral part of primary operations of a lot of companies. Outsourcing has changed the foundation of competition for companies (Gottfredson, Puryear & Phillips, 2005). With the Internet of things becoming a global phenomenon, most companies now face competition not only locally but also globally.

In the book, *The Outsourcing Dilemma* (2001), J. Brian Heywood writes that one of the most frequently asked questions in business is *'How can we become competitive and remain competitive over all our business processes?'* and he mentions that outsourcing may be the right answer to it in a word, though what type of outsourcing is a whole different ball game. Heywood also talks about the importance of considering outsourcing as a coherent part of the business, instead of an isolated process in itself.

Ramingwong (2009) speaks about how offshore outsourcing is changing the face of the global software industry. Outsourcing activities are increasingly being actively pursued by small, medium and large enterprises and they are directly linked to reduction of costs, access to specialist competencies and flexible operations.

The primary aim of this thesis is to try to evaluate the best practices for outsourcing for entrepreneurial and startup companies. By using data from existing research and comparing it locally in Norway with interviews done with various companies using outsourcing, the thesis tries to understand what could be the applicable practices that could increase success rates for outsourcing and keep its relevancy intact in the competitive enterprise world.

To understand the bigger picture of outsourcing and the details within, this thesis includes interviews from the outsourcing providers located in various parts around the world to validate if the data obtained from one party, i.e. the buyers, holds true when viewed from the opposite angle of the other party i.e. the suppliers. This helps take a look at the subject from the perspectives of both, the buyers and the outsourcing providers.

1.2 Research Question

When preparing the research question, it was important that the topic had personal motivation to it and adequate relevance to the type of Master Thesis I am currently in: Innovation and Entrepreneurship. With this in mind, I wanted the research question to prompt me to search for the innovative solutions that existing entrepreneurs have taken when starting companies with the aspect of outsourcing a significant part of their business.

With the broad research topic of outsourcing strategies globally and locally, the following research question is posed:

How to develop best practices for outsourcing for Entrepreneurial companies

Practices within the outsourcing field involve a multitude of dimensions and within this research question, the thesis aims to solve the following hypothesis questions:

- *Hypothesis 1: Identifying the right work culture fit plays a big role in effectiveness of outsourcing*
- *Hypothesis 2: Outsourcing provides a high scope of cost savings, flexibility, competencies and quality*
- *Hypothesis 3: The right tools and processes is critical for effective outsourcing*

To test this hypothesis, the literature review revolves around the above topics and the nature of the questions imposed in the interviews includes the positive and negative scenarios for the same. To affirm or disprove the data from the interviews done by the entrepreneurial companies, the data from the outsourcing providers is taken into consideration to test the hypothesis.

1.3 Motivations of the Study

When discussing motivations to this research topic, a simple question was posed, '*Why is this problem you've worked on important?*' The 'world perspective of outsourcing' is handled in the earlier section about the background of the study but the personal motivation was one of the biggest reasons behind choosing this study. The personal motivation behind choosing this research topic can be broadly divided into two parts.

Perception of current local scenario:

A paper written in the previous semester revolved around the topic 'how can Norwegian companies boost Entrepreneurship'. The conclusion of this paper was that cultural aspects along with high and stable jobs were one of the reasons for the lack of entrepreneurship. The paper briefly touched upon how SMBs and individual entrepreneurs were taking strides into entrepreneurship and forming businesses by having small teams in-house while outsourcing company critical tasks. This intrigued me, which upon further evaluation brought me to the thesis research question.

Besides this, a short conversation with Alexander Woxen, Startup Lab, Oslo, shed light on how almost every startup within their domain was using outsourcing in one form or another. In a country with high wages and stable jobs; entrepreneurs were outsourcing various parts of their business to gain a competitive edge without delving into a lot of the potential drawbacks in-house startups have to face in Norway.

Personal motivations:

The motivations behind choosing this topic were also from a personal entrepreneurial perspective. Outsourcing and the whys and how's associated with it have been of personal interest to me ever since I've moved to this country. As a student finishing his masters, I am keen to explore business opportunities after my studies where my connections in India could somehow play a meaningful role in establishing a business in Norway.

Coming from an Indian family where owning your own business was the norm rather than the exception, I am excited to understand the workings of opening businesses with little risk, administration overhead and capital investment, which seemingly formed the basis of hinting towards understanding the dynamics of outsourcing in this country.

To give a short background, I am an Indian currently studying in Norway and trying to see the outsourcing perspective from a non - native viewpoint. In addition to this, the exposure to different cultures (India for the first twenty years of my life and Norway in recent time) puts me in a unique position to try to understand this subject.

1.4 Limitations of the Research

This thesis primarily tries to keep a local focus as the primary data acquisition was mainly local with only the outsourcing providers present in the different countries. The parent or the host companies have all been founded and are based in Norway. Because of the vastness of the topic, there may be different procedures, expectations, results when outsourcing in specific industries (for example, shipping, oil and gas, finance) that were not researched or interviewed and hence not documented.

While there was no deliberate efforts to focus on outsourcing within the IT industry, the nature of the data found and collected from the interviews does give a larger high-tech and Information Technology feel to it, which is why the scope of this research can be said as limited to IT companies. Due to the limitations with regards to the time allocated, the output of the data will be constrained and have this specific dimension to it. This research is limited to 17 weeks of work. There were limited amount of interviews conducted and while there is plenty of literature research available on the topic of outsourcing, it's relevance may diminish when seeing it from a local perspective.

To reiterate, the scope of this research has been to understand the best practices for outsourcing for entrepreneurial companies with the geographical limitation of data, trying to forge a

relationship between existing material and primary data from interviews from the buyer and the supplier side.

The thesis aims to have a narrowed out scope to ensure that data remains relevant for the topic. What are construed as limitations of the research also have the opportunity to become a subset of points that could further the research on this topic.

1.5 Thesis Structure

The following chapter will focus on the literature available on the topic of outsourcing with specific themes to keep the literature focused on certain dimensions. The next section mentions the research methodologies used within the research paper as well as the method for the data collections along with the reasoning behind them. The fourth chapter is the results and analysis part, which takes the information from the primary and secondary sources of data to etch out real world findings. The thesis concludes with conclusions part that includes the summaries of the findings and possibilities for further studies to expand the topic of this research.

2. Literature Review

The literature review section is divided into the following parts. Firstly, the definitions and different types of outsourcing are explained. The following sections present literature on when to outsource as well as cultural aspects of outsourcing. The chief factors that govern outsourcing and could lean towards becoming risks or benefits are discussed in this section.

2.1 Essential Definitions

To form a correct understanding of the terminologies involved, it is imperative to include this section in the thesis. To get an overall picture about the definition of the word '*outsourcing*', definitions from miscellaneous areas have been input below.

- *A practice used by different companies to reduce costs by transferring portions of work to outside suppliers rather than completing it internally.*¹
- *It is an arrangement in which one company provides services for another company that could also be or usually have been provided in-house.*²
- *It involves the contracting out of a business process to another party.*³
- *At its most basic form, outsourcing is simply the farming out of services to a third party.*⁴

Hätönen (2008) defines offshoring as transferring business location and ownership as part of the same company. This is in contrast to outsourcing wherein a business function is contracted to a third party company. These activities or processes would have been conducted internally otherwise, according to Ellram & Billington (2001). The following words represent the companies outsourcing the work as outsourcers, parent companies, buyers, outsourcing providers

¹ <http://www.investopedia.com/terms/o/outsourcing.asp>

² <http://searchcio.techtarget.com/definition/outsourcing>

³ <http://en.wikipedia.org/wiki/Outsourcing>

⁴ <http://www.cio.com/article/2439495/outsourcing/outsourcing-definition-and-solutions.html>

or host companies. The companies undertaking the outsourcing are represented as clients, offshore team, suppliers, remote teams or outsourced teams.

Even though outsourcing and offshoring have been increasingly substituted incorrectly with each other, there is a firm difference between the two words.⁵ The following definitions and examples aim to explain the distinctions:

- *Outsourcing*: contracting work to an external organization.
 - Example: Company XYZ dealing in selling cars handing over their after sales services to a third party call center.
- *Offshoring*: Getting the company work done in a different country than which the parent company resides in.
 - Example: Dell USA offshoring their entire customer care service center to Dell India (i.e. within the company) to serve even its American clients.

In the midst of all this, there are a couple more complimentary valid terms, which are used that need to be defined well. Erber & Sayed-Ahmed (2005), define near shoring as outsourcing internationally within the same continent. Onshore outsourcing often involves delegating operations within the same country but to a different region.

The following definitions are formulated based on the accumulation of definitions from various sources mentioned earlier:

- *Offshore outsourcing*: Outsourcing operations to other companies in foreign countries.
- *Onshore outsourcing*: Outsourcing operations to other companies located in the home country or region.
- *Near shore outsourcing*: Outsourcing operations to other companies located in neighboring countries.

⁵ http://www.diffen.com/difference/Offshoring_vs_Outsourcing

From the point of view of this thesis, the aspect of offshoring is not deliberated upon, since the essential meaning of the word is different and is not relevant to outsourcing activities.

As Douglas Brown and Scott Wilson define the terms in the Black Book of Outsourcing (2005), '*Offshore outsourcing, or offshoring, refers to the procurement of goods or services by a business or organization from an outside foreign supplier, typically to gain the benefits of labor arbitrage.*' Similarly, Sen and Shiel (2006) mention '*Outsourcing refers to the practice of transferring activities traditionally done within a firm to third party providers within the country or "off-shore"*'

Hence it is worth mentioning, that from now onwards this thesis will follow a similar terminology pattern used by the above authors and the use of the word 'offshoring' refers directly to the term 'offshore outsourcing'.

2.2 When should a company outsource?

When speaking about outsourcing, one of the primary topics raised is - when to outsource and when not to? Since the research topic revolves around outsourcing practices, it felt important to read literature research on when do companies outsource and the consensus seemed largely convergent.

In the research paper, *Outsourcing decision support: a survey of benefits, risks and decision factors* (2003), Kremic and Tukul devise a self-explanatory workflow that explains the flow to decide whether a company needs to consider outsourcing or not.

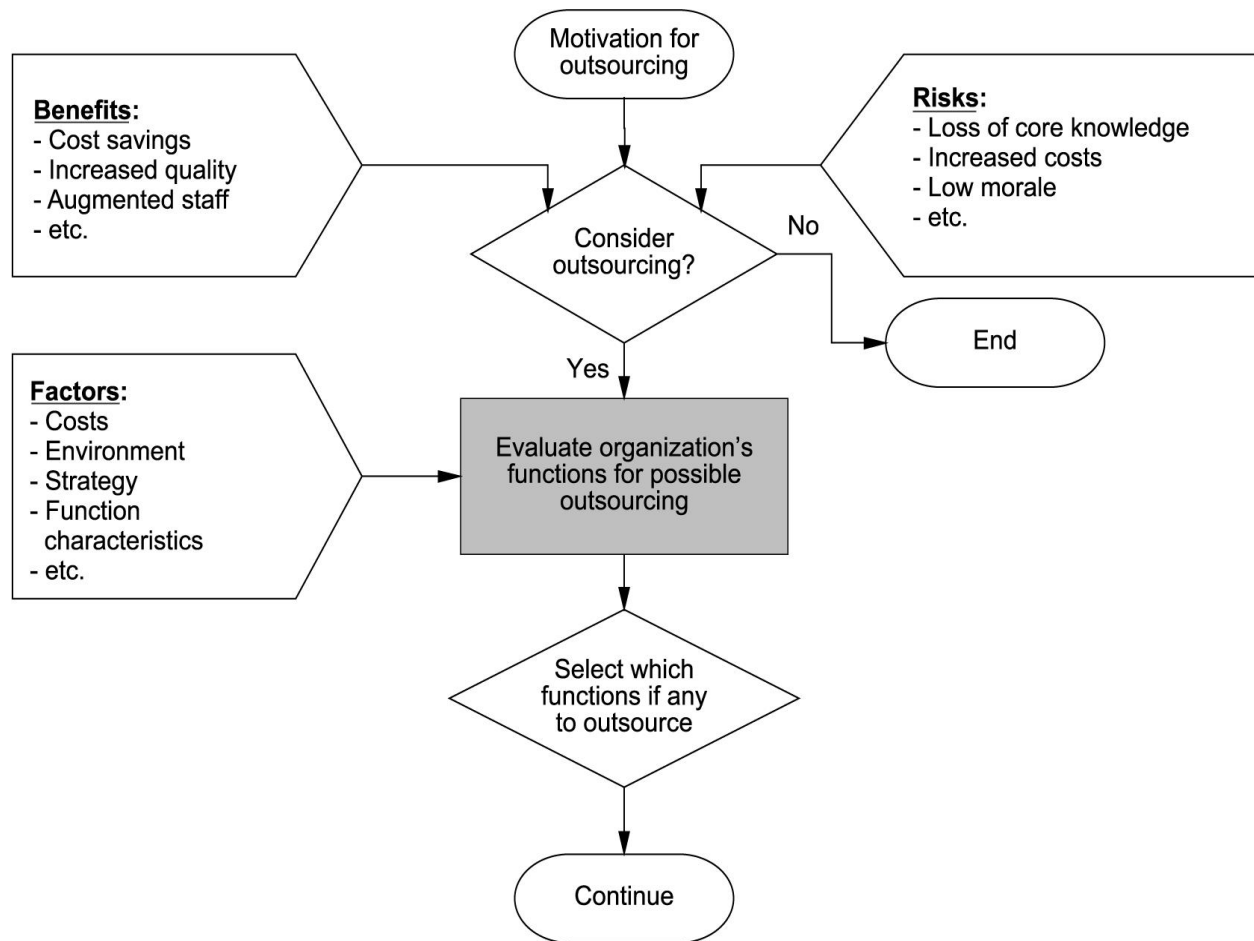


Figure 1. The motivation for outsourcing (Kremic and Tukel, 2003)

The workflow (Figure 1) is self-explanatory: the three aspects that decide whether a company should consider outsourcing is, i) the motivation, ii) the benefits and iii) the risks involved. The motivation can either be cost, strategy and/or politics (Kremic, 2003). If the answer to all three is yes or if the party accepts the factors and their tradeoffs, they should go ahead with outsourcing.

Thereafter, comes the evaluation criterion for choosing an outsourcing provider. This is done by doing a due diligence of the company with factors such as competency, costs, environment, strategy, function, characteristics, and access to technology. Based on the data collected, the party needs to assess which functions to outsource before choosing a particular outsourcing provider.

2.3 The cultural aspect of outsourcing

Hofstede (1984,1991) mentions the cultural distance varies dramatically between countries when it comes to working practices and methods. He defines it as the differences between societies or countries when it comes to how individuals perceive values, behaviors and norms.

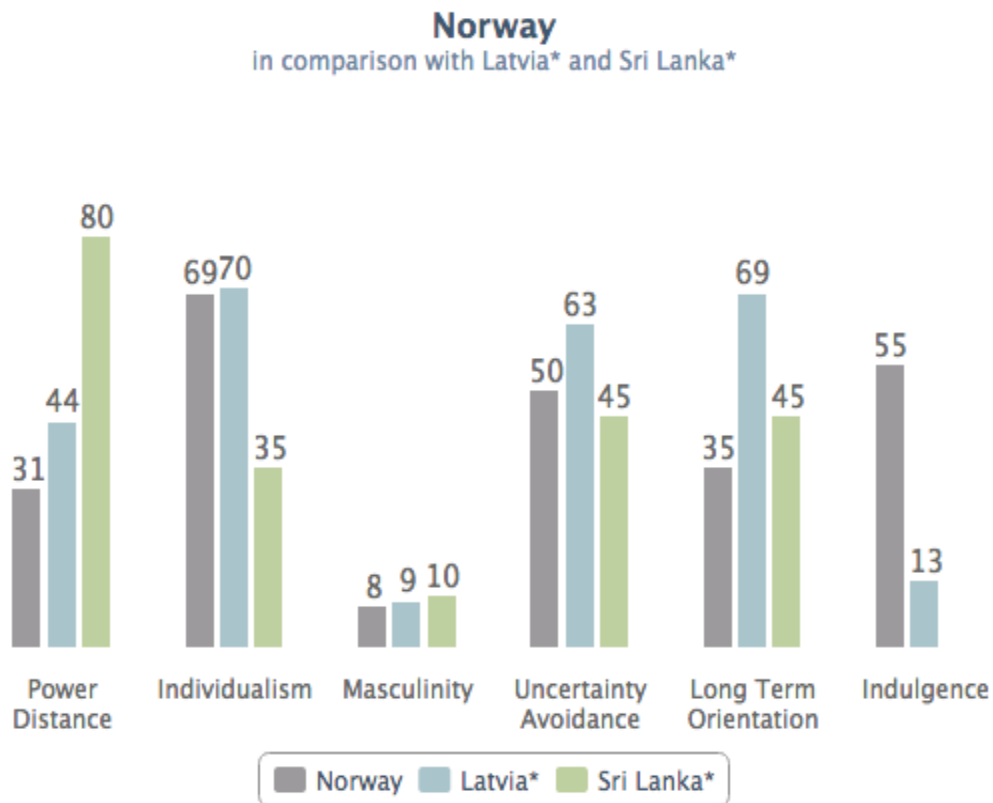


Table 1. Culture Distance: Norway vs. Latvia vs. Sri Lanka (The Hofstede Centre)

Hofstede explains power distance as the dimension, which deals with individuals within societies not at an equal level. It is *the extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally*. Countries with high power distance have higher correlation to have possible mismatches as compared to countries such as Norway where the power distance index is much lower (Hofstede, 1991). Characteristics of Norwegian styles include: being independent, having accessible supervisors

and equal rights which are not often found in countries with higher power distances. In contrast, countries with higher power distances have hierarchical structures with decision making in the hands of a select few.

The next aspect, as shown in the figure, shows the different levels of individualism, *'the degree to which people in a country prefer to act as individuals rather than as members of groups'*. Collectivistic individuals likely work better as part of a group than individualistic and Hofstede (1983), as part of his study, showed India as a collectivist country as compared to Norway.

To see this from the cultural aspect of outsourcing, failure of understanding problems and cultural differences between Asia and the West can have severe consequences causing million dollar contracts to fail (Ramingwong and Sanjeev, 2007). On the positive side, Sparrow (2005) mentions how problems can be solved by having people in different parts of the world take a look at it, irrespective of their religion, beliefs, social systems; which are challenging yet manageable scenarios, leveraging the value of both the teams.

Nicholson and Sahay (2001) had interesting feedback about a case study for outsourcing from Europe to India. The Indian teams were adapted more towards working with specifications whereas the European team had loose specifications but more intense communication to understand the project. On top of it, the outsourcing team had difficulty communicating when the team, giving an indication that the task would have been done in the first place, to the counterpart, did not understand a task. Quoting a project manager on that topic, *"They have a difficulty in saying no, they have a hard time saying 'I haven't understood' or 'I want to ask further questions'"* which was attributed towards their work culture attitude.

Ramingwong (2009) emphasizes the importance of culture. He states that *'since the most important element in software industry is human resource, the sensitivity of culture is extremely critical.'* The term culture involves beliefs, morals, laws, regulations, customs, norms, knowledge and societal habits (Anawati and Craig, 2006). Culture can also impact risk and time estimations. Ramingwong (2009) mentions that a big competitive advantage for companies outsourcing is successfully managing culture. One way to establish that is culture training for the outsourcing

team. He says that culture differences have some plus sides too, as it could give broader perspectives and opportunities to both teams, which could possibly, help the growth of innovation within the team.

Within culture, language plays an important role in outsourcing and can be a major obstacle for companies wanting to outsource. Matloff (2005) mentions that even though India is one of the top outsourcing countries due to the proficiency in Indian language, there are certain dialects and pronunciations that can be difficult to understand. With an increase in international studies and graduations, the problem of language proficiency is slowly decreasing and will continue to in the future (Ruth and Pizzato, 2007). Ramingwong (2009) adds that language issues can be accent related as well, wherein Australian or British English may not be well understood by an American, even though the common language is English.

2.4 Costs, Quality, Competencies and CSFs for outsourcing

2.4.1 Costs

Eberlien (2008) speaks about IT companies reducing costs and increasing quality by using global human resources. India tops the lists of nations as outsourcing providers, followed by China and east Europe (Westner and Strahringer, 2010). Sharma (2012) acknowledges that cost vs. value is a parameter companies often get wrong as cheapest is more often than not, not equal to best. He mentions that there needs to be a fine balance between the two and sustaining savings in the long run only happen if service remains uncompromised.

Sharma's (2012) solution to this problem of cost vs. value is to first isolate the two. First, companies should establish the value criteria and see the providers that fit the list. Thereafter, those companies need to be ordered based on costs to give a fair overview of the vendors and a decision should be made thereupon.

A report by Janco Associates (2003) laid out the average incomes of programmers in leading nations to show the difference between outsourcing to developing nations as compared to mighty nations. The costs for employing developers in the United States were expected to be more than

four times the costs to employ developers in India in the year 2015. For countries such as China and Malaysia, the costs dropped even more. The full table is listed below (Janco, 2003):

Country	Expected Wages in 2015 (in \$)
United States	85000
England	67000
Germany	65000
India	20000
China	10000
Russia	25000
Malaysia	9000

Table 2. Expected Average Wages (Janco, 2003)

The same report noted that the wages of Indian and Chinese programmers were, in 2003; up to ten times lower than those in America. Tafti (2005) states that while the base wages are lower, there are other costs such as infrastructure, vendor searching, transition, post-outsourcing and other costs beyond baseline services that often present themselves and can be unaccounted for.

Other extra costs include, communication, travel and cultural training costs. Ramgingwong (2009) touches upon cost savings as an unbalanced parameter. He mentions that reduction in labor costs cannot be compared to the tiny communication and travel costs. Modern technology is helping in driving down these costs as companies need to travel lesser and the need to speak face-to-face is diminished. Other costs like vendor searching and infrastructure can be cited as one time costs rather than recurring costs and can be accounted for (Ramingwong, 2009).

2.4.2 Quality and competencies

One of the primary reasons for outsourcing is the unavailability of skills and competencies in particular areas, but skill set and capabilities of an offshore workforce can also be questioned in certain scenarios (Sakgasit and Lachana Ramingwong, 2009). Matloff (2005) agrees, adding that offshore competencies are often lacking in quality as compared to those in bigger countries. While that doesn't indicate that skill may be lacking, he states that there could be a possibility that it is hard to find, especially for a remote and not local team.

On another dimension on the same topic, parent companies are often risked with losing competencies due to over reliance on offshore providers (St. Amant, 2010). Earl (1996) mentions that internal competencies take a big hit when companies aim to continue to be competitive and innovative. As a solution, Earl mentions that an examination of the skill sets needed post outsourcing should be done to ensure competency drain does not occur.

Quality issues from outsourcing providers have been documented aplenty. Outsourced teams perform significantly worse than engineers in major countries (Frank S. J, 2005). While others (W. Burger, 2007) report that there is a stark difference in the quality delivered by outsourced teams, which is an order of magnitude higher than those from major nations.

To solve the problems related to quality, one of the advices given to understand quality of the outsourcing provider is to see their ability to tackle small tasks which are not business critical. If performance matches the quality desired, then the level of task criticality can be increased (Ramingwong, 2009). Sharma (2012) states the importance of pilot projects to gauge quality related issues.

To identify levels of performance of different outsourcing providers, pilot projects provide a good measuring scale even though this hasn't been predominantly being used by organizations while choosing outsourcing providers. This helps making the selection process more robust and increases the chances of outsourcing success (Sharma, 2012). In fact, if the possibility arises, having pilots with multiple potential providers gives a good competitive overview of the quality companies can expect.

An independent risk consulting company, Protiviti⁶, mentions the negative aspects of outsourcing citing delivery delays as one of the most aggravated risks with regards to outsourcing. The factors, often outside the scope of the parent company to handle, include issues with labor, politics within the country and even extreme cases such as terrorism and SARS. Owing to this, end user or customer satisfaction levels greatly drop if the outsourced option in that part is the company's core product/service.

While this may seem a bit far and off on a day-to-day basis, a more literal delay was mentioned in a recent study (AfriConnect Zambia Limited, 2011), which cites Internet as the bottleneck for some countries, that causes delays due to poor infrastructures. These create typically difficult conditions to continue voice and video communication, which is an almost unavoidable case against outsourcing teams present in those regions.

2.4.3 CSFs for outsourcing

To summarize the critical success factors for outsourcing, Sudhakar (2013) shows the following diagram with data from an empirical study done by Belassi and Tukul (1996):

The below multi-level model consists of ten critical success factors for offshore software projects and the relationship between each of these factors is showcased above. To explain, the first level of factors, namely, cultural, language, time zone, organizational and environmental are connected to the third level of factors, technology and knowledge transfer, project factors and team factors via communication factors. These are critical for offshore software project success.

⁶ <http://www.protiviti.com/en-US/Documents/Surveys/ManagingOutsourcingRisks.pdf>

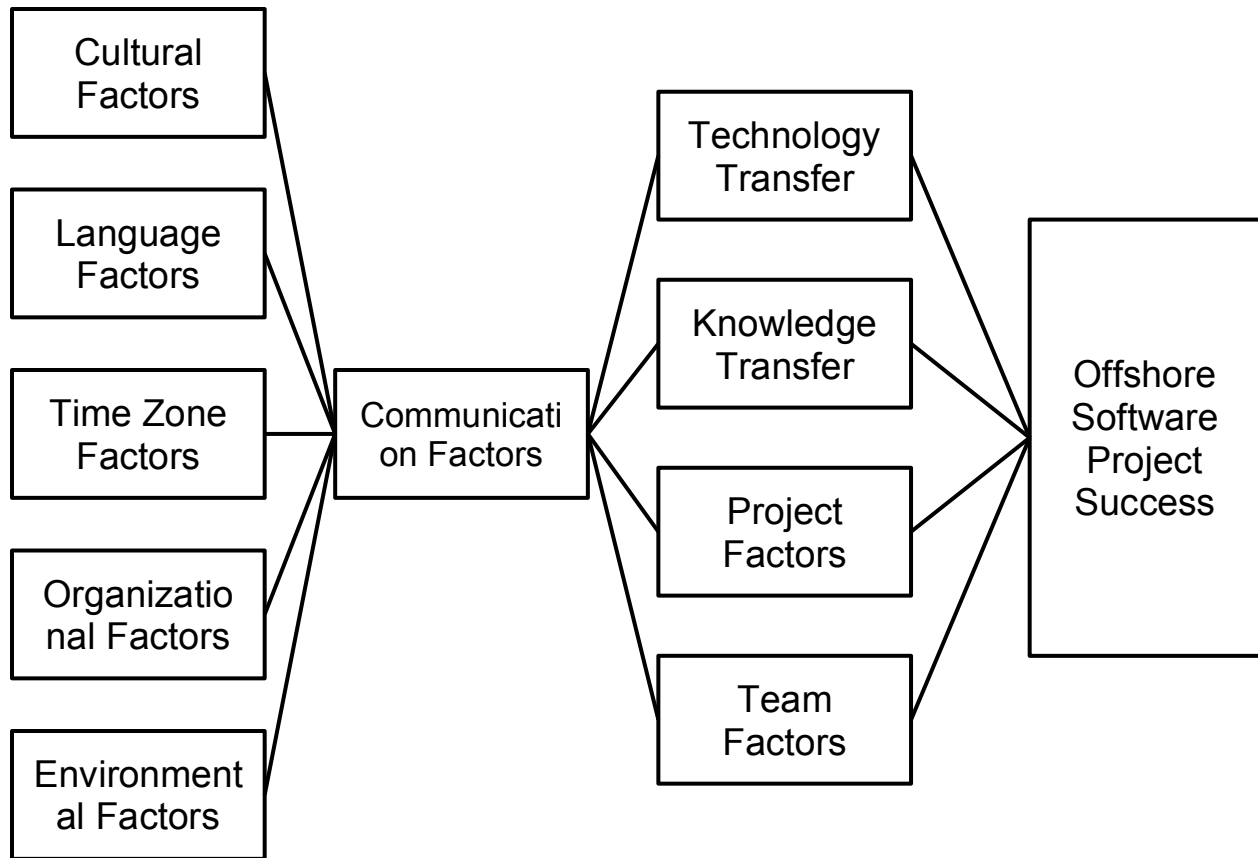


Figure 2. CSFs for outsourcing (Sudhakar, 2013)

The author mentions that, *"the relationships between different CSF categories may be correlation, regression or just information flow as well."* While this table may just be relevant for software projects according to the author, it is relevant to the broad sense of outsourcing. The conclusion was that the vast variety of factors that contribute towards successful outsourcing can be classified under those factors.

2.5 Tools and Processes for Outsourcing

Tools are essential for successful outsourcing (Sharma, 2012). Taking market research as an example, he explains that the critical factors for operational outsourcing efficiency include survey programming tools, dialer management program and data analysis tools. Similarly, for organizations on the lookout for outsourcing providers should ensure that the technology tools

and the overall infrastructure meet the industry standards and their needs. Sharma adds, *"The tools and technology used by an outsourcing vendor facilitate higher operational efficiencies and quality of service, and organizations should lay special emphasis on this aspect."*

There is a possibility to have outsourcing projects operate 24x7 (Ramingwong, 2009). The author gives an example, if there are teams in Canada, UAE and New Zealand, then programming and testing can be a round the clock cycle where the programmers have their tasks and testing results to work on every morning, while the testing team can work during their time zone to finish testing. This could increase the productivity of the team. Matloff (2005) mentions that 24x7 operations can be counter effective due to delayed communication and zero overlaps.

To give another example, Ramingwong (2009) states that if the design and development teams are present in different countries, misunderstanding can create major delays. Nearshoring can help address that issue since there is significant overlap between operational times of the different teams. To solve time difference issues, Ramingwong (2009) advises appointment of resources for different shifts that help co-ordinate the activities between the different teams to increase efficiency.

3. Research Design and Methodology

Wilson (2010) mentions the importance of having set a framework to ensure the thesis is guided properly and has the backbone structure in place to achieve the goals that the thesis intends to find in the first place. Yin (2009) also emphasizes the importance of having a good research methodology that binds the literature, research questions and findings to form solid conclusions.

3.1 Research Method

The definition of a case study research, according to Robert Yin (2003), *'A case is an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident'*

The reason why the case study approach is chosen because it matches the requirements mentioned by Yin which are:

- a. *'How' or 'Why' questions are being posed*
- b. *The investigator has little control over events*
- c. *The focus is a contemporary phenomenon within a real-life context*

If we revisit the research question,

How to develop best practices for outsourcing for Entrepreneurial companies

The research question is of the 'how' variety and not 'how many', 'when', 'why', 'where', or 'who'. Yin (2009) categorizes case studies as primarily answering the 'how' or 'why' of a research question with qualitative analysis, as the researcher has little control over the data.

In the hierarchy of design and methodology choices to make, the foremost one is to decide between qualitative and quantitative methodology. For this thesis, I have chosen to go with the

qualitative analysis because of the topic chosen and the type of data extracted. Due to it being time-bound as well, the decision was taken to focus on the qualitative aspect of the study. If the research question had turned into a 'what', then a quantitative analysis would be more suited.

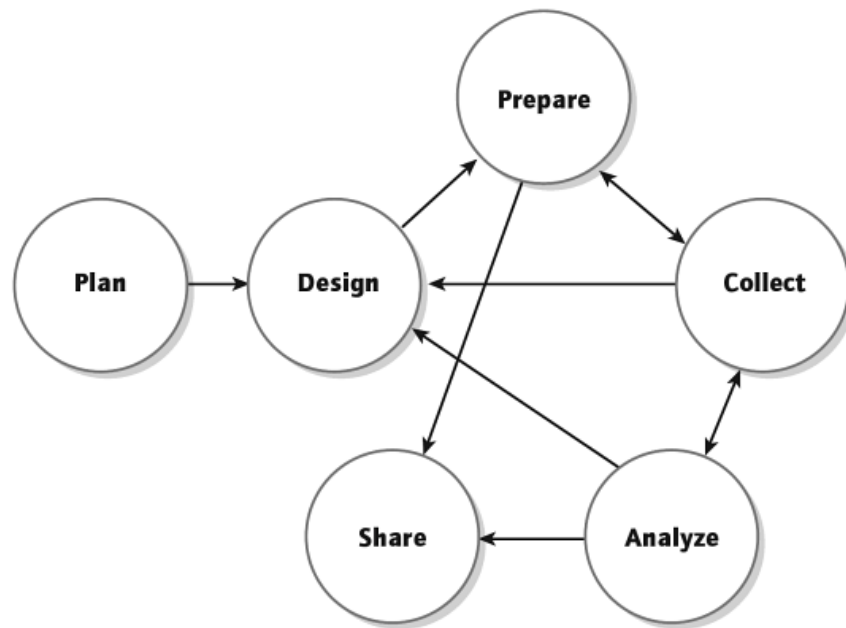


Figure 3. The Case Study Research Process (Yin, 2009)

The six sources of evidence that can comprise a case study include documentation, archival records, interviews, direct observations, participant observation, and physical artifacts. Yin (2009) advises to use as many sources of evidence to form a good case study. For this thesis, documentation and interviews formed the main sources of evidence. Owing to the fact that the author works in a company using outsourcing, a small sum of direct observations can be used as evidence source as well.

To increase the quality of a case study, Yin (2009) talks about including the use of:

- a. *Multiple sources of evidence (converging on the same facts)*
- b. *A case study database (a formal assembly of evidence distinct from the final case study)*

c. *A chain of evidence (explicit links among the questions asked, data collected and conclusions drawn)*

To form a chain of evidence, the interview questions were formulated based on the literature reviewed as part of the thesis that naturally forms the conclusions .

The research study is a type of exploratory research with a mix of both inductive and deductive approaches due to the nature of the topic chosen.

	Narrow	Broad
Narrow	Single Case designs (Holistic analysis)	Multiple Case designs (Holistic analysis)
Broad	Single Case designs (Embedded analysis)	Multiple Case designs (Embedded analysis)

Table 3. Case Design (Yin, 2009)

The reason why the single case design is chosen is primarily to one case with multiple sub cases to try to establish the theory and thus having a stronger output (Wilson, 2010). For this case study, the cases are chosen such that there are a total of case studies in a similar background structure to ensure that results are relevant to each other. To have a stronger research outcome within that particular unit, I chose to go with the single case design case study. Holistic cases take one case as one single unit of analysis and the functions as part of the topic of outsourcing as the subcases.

3.2 Unit of Analysis and Unit of Data Collection

The unit of analysis for this research study is largely singular, which is outsourcing in the IT industry. This industry is chosen primarily because of its close relationship with the unit in the

current period of time but also due to the professional experience of the author who has worked in this industry with outsourcing providers for a period of four years, giving a better proximity towards obtaining valuable information via research and interviews, which would be missing if the industry were different, say for example, oil and gas or finance.

Due to there being one unit of analysis this is a single case study and the interviews with the IT companies form smaller sub units within the same unit. It is worth noting that Yin's input on single case studies mentions that there could be reliability issues, and to try to minimize the risk due to that, multiple interviews have been taken with different people in the same industry and are combined inside this single study.

If more cases would be added to convert this into a multi case study, there could be possibilities that the data would be unbalanced and only partially relevant, hence the scope of this research was boxed to ensure the relevance of the data obtained.

3.3 Data Collection

Data collection was done using primary data with semi-structured interviews. Over a period of two weeks, all the companies were contacted with the first preference being face-to-face meetings.

3.3.1 Interviews

The main aim for the primary data for the interviews was to get different companies within similar or same industries but from a similar size category. This confirms to the 'narrow' category the single case design belongs to. The interviews conducted with the Norwegian SMEs and the offshore companies had structured questions but allowed interviewees to add more insight and information if needed. The interviews are a combination of face-to-face and Skype video interviews. These are considered relevant because of the advantages they provide. Wilson (2010) mentions the advantages of verbal communication include better engagement, recording the

conversation for future visits and flexibility of questionnaires to be asked based on responses. The disadvantages with verbal interviews could arise in case researcher was a team member, but that was not the case with the respondents. The manner of the interviews was semi-structured and conversational and the beginning included a brief introduction and a background of the company. Due to time constraints for the interview respondent, one interview had to be conducted in written. This is categorized as a hybrid approach (Wilson, 2010).

Based on the information provided, the interviews lasted between thirty minutes and one hour. The audio from the interviews was recorded and transcribed immediately afterwards. The reason behind this was to ensure that they could be repeatedly heard for the analysis stage of the thesis. Wilson's (2010) process for qualitative interviews includes: transcribing data, reading and generating categories or themes, interpreting the findings and writing the report and the study has tried to follow that theme with the interviews.

3.3.2 Ethics, Reliability and Validity

There is a strong case for ethics and reliability primarily because of the author's prior professional involvement in outsourcing. However, it is worth mentioning that neither of the interviews was done with existing or prior team members or leads. Participants for the interviews were carefully picked with the help and network of the supervisor to ensure they were relevant and in the same domain. Wilson (2010) informs that reliability issues could occur in such cases as the interviewer could have preconceived opinions that could falsely steer the outcome of the interview, giving it a biased output. Yin (2009) informs that it is important to be careful to not let the reliability of the study be affected due to it. To answer, the basis of this interview and research had an exploratory nature to it and great effort has been made to ensure data collected from the different sources has been transparent and without biases.

Another dimension that could affect the reliability of the data is the source from where it appears (Yin, 2009). To ensure the data is as clear as possible, it was sourced from the CEOs and the founders of the various companies to ensure credibility and accuracy as opposed to interviewing people in positions junior to these roles. Owing to the nature of the data and topic, the

interviewees preferred complete anonymity and release of transcripts only upon prior request and permission. This was decided before the interviews began to ensure the responses would be free from the thought of saying 'what is right' instead of giving the raw true data required for the research. This confidentiality has been respected throughout the thesis research and none of the interview respondents or their company names have been divulged.

Yin (2009) speaks about the four tests inherent to understand the quality of the case study: internal and external validity, construct and reliability. To ensure that these parameters are adhered to, the author has used multiple sources of clear evidence with explanations behind theories and analysis. Still, it is worth mentioning that this study is done during an 'x' period of time and its validity may have to be retested if the period of time is expanded over a bigger timeline and with other industries.

4. Results

The results and analysis section is broken down into sections based on the hypothesis that it aims to analyze. The companies are introduced and interview responses are collated with the hypothesis questions to form the summaries.

4.1 Company Presentation

This section gives a brief overview of the different companies interviewed and their background. The companies are all SMEs or in startup phase in the IT sector. The companies are from both sides of outsourcing, i.e. the parent companies or the buyers and the providers. As mentioned in the previous chapter, the companies are part of the same subset as part of the single case study.

The following is a brief description on the companies that were interviewed as part of this thesis:

Company A

Company A is two people startup based in Oslo that is currently building applications in the business to consumer IT sector. They are currently using near shore outsourcing development to help with their product development.

Company B

With Company B, the interview spanned across two companies that were started by the founder. One of them, which did not meet success while the second one, is in progress. This is a business-to-business company in the IT industry and is roughly two years into the startup phase. Besides the questions template that was followed, the interview also touched upon the lessons learned with the previous company and how they applied to the new company. At present, the founder solely manages the company in Norway and they have two different development teams outsourced in different countries making it a diverse spread out team. The company had a trial

run with a previous outsourcing provider after which it switched to a new one during the course of time. The hypothesis analysis section presents the interview finding more deeply.

Company C

Company C is in the broadcasting and social media domain in the IT industry and they use a tool for harvesting this. The company has an internal team (<15 members) in Oslo and two offices in UK and US. The outsourcing team is located in Europe and the development happens both in-house and outsource with the large share of the product development undertaken by the outsourcing team.

Company D

Company D is an outsourcing provider or supplier and is based in Ukraine. It was established a year ago and is undertaking multiple projects in US and Europe. They also operate as an outsourcing broker and proxy between clients and local outsourcing providers, trying to find the best connections to handle the client projects. The company has a Norwegian founder based in Kiev, Ukraine on behalf of clients in Norway. The projects vary in size and duration, depending on type of work, fixed, out staffed or recruitment to Norway.

Company E

Company E is the outsourcing provider for company C, which gives an interesting dimension to the research in terms of data validity. To ensure the data would not be biased, the company did not know the type of questions asked to the parent company and if the parent company was interviewed. This was spoken and accepted beforehand with Company C. They are based in Latvia, Europe and have a team of seven-eight people focused on development along with a testing and a design team. They accept projects that are at least 3-4 months in timeline and do a prior evaluation of the resources needed for particular projects based on specifications provided.

Company F

Company F is a business and market research firm providing data collection and research insights to clients globally and houses itself in India's top ten research companies by Silicon India Magazine 2015. Its headquarters are in Pune, India and the company provides research services in Europe and the US. In terms of company structure, they have a full-fledged team with IT, HR, Sales, Operations, Admin and Quality Assurance with individual leaders for these modules reporting to the CEO. Their motivation to accept projects depends upon the geography, target audience, detail of scope and methodology. Resources are based on feasibility and timelines available and the projects accepted range from 1 week to 10 weeks.

4.2 Findings

This section takes each of the hypotheses mentioned in the beginning and tries to accumulate the interview responses on the particular topic to verify its validity.

4.2.1 Hypothesis 1: Identifying the right work culture fit plays a big role in effectiveness of outsourcing

While acknowledging that culture plays a big role when outsourcing development, company B mentions that they specifically did not see culture as that much of a problem, primarily because the team had a Norwegian representative who had done a pre-check of the required qualities of the outsourcing team.

"Many say that, mainly argue that in India and Sri Lanka and places like that the culture is not the same. So it is really hard to get the mindset of Norwegian development into a team like that. That is actually not my experience. I have not worked with an Indian team, but I have worked with Sri Lanka and both their culture and the way they approach things, and the way they solve things, I would say is very modern" - Company B

Later on in the interview however, he mentions that when the company switched outsourcing teams, from Sri Lanka to Belarus, the problem (or the lack of it) of culture surfaced itself. The

interviewee mentioned that social and cultural aspects such as long tradition of Math and Physics and modern mindset in schooling played a role in his opinion to distinguish the quality of work done by the team. Being a startup outsourcing their product development, the founder had more time to focus on important things as compared to handling social aspects of the company. He acknowledged that he knew his developers were well taken care of by the company that hired them.

"Both the companies I have used had a Norwegian representative" - (Company B)

Company D had some interesting insights related to culture and outsourcing. The interviewee mentioned how he felt the difference between Slavic and Norwegian culture after experiencing both and accepted that culture was a challenge that his company is trying to overcome. To try to solve this issue, they aim to have a strong specification and clear contract along with a personal brief in advance understanding the expectations. They also have follow ups on status of projects follow the SCRUM model or a variation of it. He admits, culture is an often-neglected issue but needs to be accepted and understood before taking up projects with outsourced teams. A lot of times, the teams are offered to work on site to improve conditions that are occurring due to cultural differences.

"The only current challenge is sociocultural. The Slavic culture tends not to value quality of delivery, does not respect time and budget and sometimes tends to have varying focus on priority. I also would like to mention it's been a high learning-curve understanding the local conditions" - (Company D)

Company A was engaged in near shore outsourcing and as a result mentioned that cultural issues did not occur during outsourcing, which would be understandable given the nature of the geographical location of the team. However, one of their primary reasons to be unwilling to deploy offshore was culture being a big question mark.

"We did not have an offshore-like situation, the social and trust levels were very high." - Company A

Company C and E are outsourcing buyers and suppliers for each other so their responses are clubbed to understand the topic from both dimensions. Company C has employed a project manager on the outsourcing provider side to help out with language issues. He works as an interface to ensure tasks are understood well by the outsourced team.

"We had to accept that we could not talk directly to the developers. Talking to the project manager and make sure that she understood the tasks so she can explain it to them. (Be)cause there are some misunderstandings sometimes. The language has been the main problem for us."
- (Company C)

Company E confirms, mentioning that language has been a big cultural issue for them. Having one of the developers occasionally come to the offshore team would help the offshore team to get a better overview of the development, mentions company C as a solution to the barrier. Also, having the project manager, who is good at interpersonal and language skills has been a good workaround.

"The problem is that when it comes to speaking and talking, there are some problems, they are either too shy or just have no experience in talking and then the quality of the conversation is not good." - Company E

Company F admits to facing socio-cultural problems. The basics to understand the style and culture of working with clients in different countries are different. The founder mentions that to counter these cultural issues, they have training sessions every quarter to accommodate teams with different cultures in order to achieve better in their work atmosphere.

"An American client has a very direct style of working whereas a British would take time to build trust and stay for longer." - Company F (on examples of cultural difference)

4.2.2 Hypothesis 2: Outsourcing provides a high scope of cost savings, flexibility, competencies and quality

Company A has been impressed with the amount of flexibility outsourcing has provided them with. At this juncture, they are yet to prove their business model and preferred variable costs, rather than fixed and outsourcing provided them with just the right amount of flexibility. In case they are not happy with the quality of the outsourcing, within a months notice they can shut shop and move on to something else.

"One of the main strengths from my perspective is the flexibility and quality that we get" - Company A

For startups wanting to get a team quickly assembled, Company B mentions the challenges of getting good developers in Norway, especially for a fresh new startup company. With the experience from the previous company, he took the decision to use an outsourced team. He mentions that predicting permanent employment is difficult in startups.

"If it (the startup) is a success you can hire people for long term, if it is not you do not want the problem to scale up and down." - Company B (on flexibility advantages of outsourcing)

Continuing the topic, he mentions that the whole setup took a week to setup. In fact, when switching between the outsourcing teams, within a week the code was shared and the second team continued on the tasks, giving an indication of high flexibility and quality. He mentions that possibility to scale up and down extremely quick, the ability to test resources - hire/replace resources if not up to par gives him great flexibility. As a comparison, doing the same in Norway would put him under great legal hassles, which could prove costly for an SME. While choosing an outsourcing team, it is important to understand the terms with which you can hire and replace your teams

"So basically, if someone leaves the team or stops performing, the cost of training a new person and making sure it is sufficient is not mine." - Company B

Company C mentions the importance of time for them as a business. All outsourced resources are put in the product development, giving Company C more time to focus on more important things for the business. Not having to hire or fire people is another big advantage.

"We get more back than the time we have spent managing them." - Company C

From the other perspective, the outsourcing provider Company D speaks about how important flexibility is to them. Their goal is to 'be available' all the time to ensure little delay occurs interfacing with the team. With the use of communication tools like Skype, email and Dropbox, the company portrays an 'always on' state to the parent company giving them enough flexibility to get in touch as and when they need it. He says that is one of the most important benefits of outsourcing that gives company time to focus on other business matters.

For Company F, because their buyers are located around the world, they to deal with time differences and geographical problems. They set up a process to have different teams work round the clock to ensure quick communication with the customer. Along with this, they use tools that ensure real time data is transferred to the buyer side for the companies to have the latest update and not miss the in-house feel.

On the topic of cost savings, Company C informed that if money was not an issue, the team would probably be completely in-house. However, in real world scenarios they get around two to three times as many programming hours done offshore than in-house. The flexibility adds up as well as the team can slow down and rank up a little bit without having to hire or fire.

"In terms of costs, I would say it (savings) is about 50%. But it all depends, you can get a cheap team, but you also get cheap or bad results. So it all relates to quality I would say. So compared to the team I have right now, if I wanted to hire the same type of experience and get the same type of efficiency I would say its 50% cost. And also availability of resources is really poor because I can scale up in a matter of weeks, and not spend any time on hiring resources and facilitating developers, I can just say to the managers i have here in Norway that I need 5 more people and they will fix it in a couple of few weeks." - Company

B on cost savings and flexibility

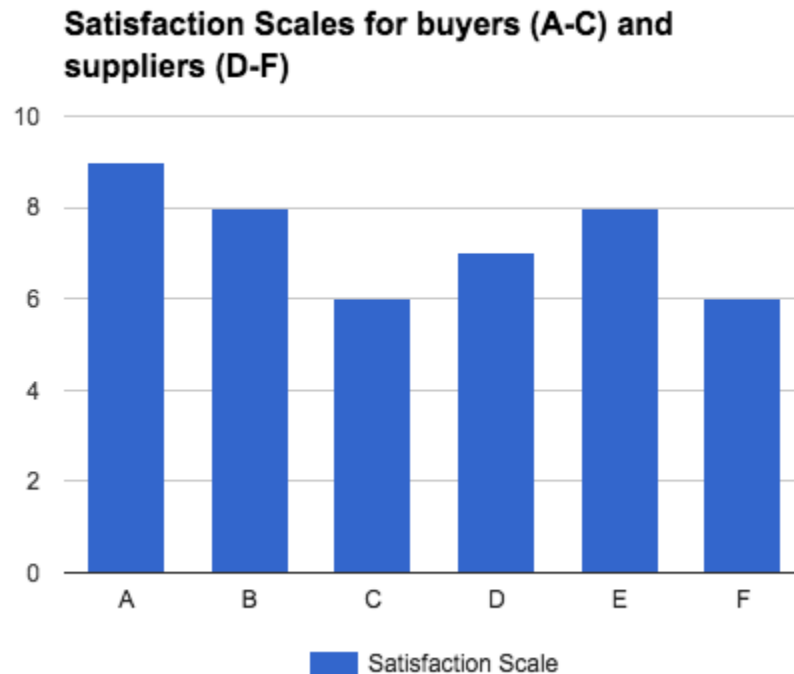


Figure 4. Scale of satisfaction of quality from supplier and buyer side (Interviews)

Figure 4 shows the satisfaction for implementation of results towards the buyers and the interesting part about the data is that the buyers were more satisfied with the results provided by the suppliers than the suppliers were about the results they provided. A holistic comparison may not hold true since the companies aren't buyers and suppliers for each other barring company C and company D where the outsourcing providers believed the quality of their implementation was higher than what was interpreted by the receiver of the quality, company C.

4.2.3 Hypothesis 3: The right tools and processes is critical for effective outsourcing

Once the setup was completed in two weeks time for Company A, they set up processes to ensure a smooth flowing structure. Using tools like Trello⁷ for checking backlog issues, Slack⁸ for communication and Github⁹ for checking commits, the internal team has a good overview of

⁷ <https://trello.com/>

⁸ <https://slack.com/>

⁹ <https://github.com/>

the progress. Sharing information and the way it is shared is critical for the team to perform effectively.

Company B talks about how technology has brought the outsourcing team much closer. The founder stood firmly behind the technologies used and explained how it helped them achieve visibility and help drive down costs. For more visual discussions and things related to user interface, modern tools such as Viewflux¹⁰ for collaborating on prototypes and screens are used. The interviewee mentions that using these tools is the best way to monitor progress. The process is fully integrated with development tools and it provides a complete overview at any given point in time.

"We use Skype and HipChat¹¹ but mainly all communication goes through Skype¹², along with daily standups. Other than that, we use tools from Microsoft for devops or development operations. So everything is handled in terms of sprint plannings, tasks and overviews and sprint boards and all of that is done in what is called Visual Studio online¹³." - Company B

For processes, company B has set up two-week sprints that include deliverables for the outsourcing providers. The interview mentions that the old method of having fixed dates and versions with somewhat of a waterfall process did not work for them. Creating software as a service required them to introduce continuous deployment where the features are released as soon as they are developed.

"The team deploys new functionality every second week and it is the responsibility of the outsourcing provider to ensure that." - Company B

To drive the point home, the interviewee mentions that tools and processes are important to establish when the outsourcing team has been selected, he warned against the use of tools to recruit outsourcing providers including that gut feeling should be rated higher than tools in that

¹⁰ <https://viewflux.com/>

¹¹ <https://www.hipchat.com/>

¹² <http://www.skype.com/en/>

¹³ <https://www.visualstudio.com/en-us/products/visual-studio-online-pricing-vs.aspx>

case. For both of the startups, the interviewee visited the outsourcing providers after selecting them.

"The human contact is really important, you need to know who your dealing with, and you learn a little bit more than what you can see through Skype and emails. So I prefer to meet the team I am working with face to face to get to know them (before operations begin)." - Company B

Once the project begins, a customary visit every six months is made to check operations working smoothly and ensuring a face-to-face communication. A project manager cum senior developer metes out the daily tasks for the developers. The project manager is responsible the sprint is on schedule. Knowledge transfer was done during the first visits and weekly Skype meetings on the features.

Company C's structure has the outsourcing team performing their own isolated tickets and task, and the in-house team don't necessarily talk to them everyday. The communication only happens in case tasks intercept with each other or need collaboration. The project manager generally has a Skype meeting once a week including a retrospective and status. Communication is done via a ticket system. The internal team does decisions generally, but when bigger tasks are given to the outsourcing provider, then they are free to decide internally how to execute them - what libraries and methods can be used. The parent team validates these.

"Weekly Skype meetings and mailing systems do the trick for us." - Company C

The product manager was hired within the outsourcing team to communicate with the customer (buyer) and follow up on the tasks. She is the interface between the two teams and has the responsibility for smooth functioning of the units.

"For communication we use Skype, e-mail, Dropbox¹⁴ and preferred project tools such as Basecamp¹⁵, Redmine¹⁶ or Jira.¹⁷" - Company D

¹⁴ <https://www.dropbox.com/>

¹⁵ <https://basecamp.com/>

On knowledge transfer to the outsourcing provider, Company D (the outsourcing provider) speaks about the importance of having well documented requirements in the project specifications. If projects aren't well documented, it is important to frequently have face-to-face communications with the two teams to ensure the product developed as per requirement.

Company E agrees about the importance of having good documentation. In their experience, weakly documented projects took around fifty percent more time to complete as per their expected timeframes. The interviewee informs about differentiating between architecture planning and feature development while planning a project. Ensuring this process helps in breaking down the project into several small modules that can be tackled independently.

"Lack of documentation (from the buyer side) is the biggest problem yet." - Company E

It takes between two weeks to six months to derive a working structure between companies, since processes have to be set up in agreement with both the companies, mentions Company F. Some key factors are quality process, vendor approval process, evaluation rounds and final decision-making authority. Most of the discussions happen via emails, phone and videoconference so it saves time for meeting face to face but relationship management requires meeting face to face at least once a year, says Company F.

Not choosing the right processes or not streamlining them can create deviations for both teams. Some of the reasons for client and supplier side mentioned by Company F include:

Client side: More time in checking the interim data before giving a go ahead on full launch, change in specifications, delay in decision-making, change in the questionnaires and lengthy quality check procedures

Supplier side: delay due to non-availability of enough data, holidays, less timelines, low incidence on quotas and scope.

¹⁶ <http://www.redmine.org/>

¹⁷ <https://www.atlassian.com/software/jira>

"We use Microsoft Lync (Skype for business), Email and Telephone – they meet our expectations." - Company F

Speaking about setup costs and processes, Company C mentions that there was a time period wherein the outsourcing team wasn't showing much output initially but over a period of time, they reached the desired efficiency levels.

"It took a long time..almost a year..before we were feeling a bit more confident on what they (the outsourcing team) were doing." - Company C

Knowledge transfer and ownership is one of the processes that is the most time consuming and often ignored aspect of outsourcing. Company C mentions that ideally the outsourcing team only carries out tasks. Sometimes when they are given bigger tasks, they can make decisions of how to finish the tasks. The company has an internal project manager and a project manager for the outsourcing team that ensures processes remain relevant in the development process.

"We use that (tools such as ticket systems, tracking systems, wiki) more now than we did before we started to do outsourcing." - Company C

5. Conclusions

This section summarizes the finding from the results and analysis sections with the hypothesis. Further, the section details the possibilities that can help expand the scope and understanding of the research topic chosen with further research.

5.1 Summary of Findings

Hypothesis 1:

Identifying the right work culture fit plays a big role in effectiveness of outsourcing

Summary of findings for hypothesis 1:

The literature review speaks about the perils of not understanding the importance of culture. The summary of the results from the interviews leans towards acknowledging the effect of culture on work ethics, morals and even work timelines. As part of the interviews, one out of the six companies switched providers and had culture as one of the reasons to do so. The others emphasized that culture has been a force to reckon with and a common undertone in the responses was the presence of Norwegian representatives for either selecting or operating with the outsourcing providers. One of the common suggestions from the literature and the review to tackle the cultural problem was the introduction of cultural training sessions that could help bridging the gap between the two teams.

Before selecting the geographies of an outsourcing provider, a due diligence of the cultural aspects of the professional can prove to provide insights on the working processes and norms that may regulate or show up during operations between the teams. What could add further insight to this hypothesis is research on companies that have failed with outsourcing primarily citing cultural factors.

Hypothesis 2:

Outsourcing provides a high scope of cost savings, flexibility, competencies and quality

Summary of Findings for hypothesis 2:

Literature review on this topic has been swaying towards both extremes. While some say cost savings do happen, some literature mentions how there are hidden costs that replace these cost savings. Even competencies may be difficult to find but if they are found, it results in great quality shipping back to the buyer. The findings in the literature review section stated that salary costs for developers in the U.S were \$85000 and \$20000 in India, which is around four times the savings. This was convergent from the interviews, as cost savings ranged from 2x to up to 4x for companies.

At the same time, interview responses stated that satisfaction from quality levels varied between 60-80%. To cross verify the data between cost and quality from the interviews, company B which observed 50% cost savings were 80% satisfied with their outsourcing provider as compared to company C which observed around three times cost savings rated their satisfaction levels at 60%.

While this amount of quantitative data may be far from conclusive, the point taken is to understand the balance between cost vs. quality and value provided by outsourcing and for companies to target that sweet spot in the middle. While there was little local literature review on flexibility benefits of outsourcing, the interviews shed light on administrative benefits of not having to hire within the country and scaling up and down within a matter of days. This is one of the often-overlooked benefits of outsourcing.

Hypothesis 3:

The right tools and processes is critical for effective outsourcing

Summary of Findings for hypothesis 3:

Literature review focuses on explaining how processes can make or break the outcome of outsourcing. From the interviews, it was clear that current technology is playing a major role in leveraging the quality of outsourcing. Skype was voted by the maximum amount of respondents

as their preferred communication tool. Along with that, tools to keep track of bugs, processes and tasks were attributed to helping teams communicate better.

Project managers on the outsourcing end helped establish processes to ensure the team dynamics were in sync with the parent companies. Documentation and the importance of it was another emphasized topic by both the buyer and the supplier side. Setting up processes and structures could take from up to two weeks to six months or even a year depending upon project complexity, infrastructure setup, knowledge transfer, developing architecture for the solution and maintaining up to date communication and documentation.

To outline the main process tools and processes detailed by the interview respondents, they are broken down into design and development phase (taking a pure IT software perspective). For the design phase of a project, the recommendation is to use modern software that incorporates virtual collaboration between different teams. This helps in both scenarios, if the user interface design is outsourced or in-house. For outsourced UI designs, the in-house responsible team member in-house can, in real-time, view the changes in the graphics and hence save time developing for a product that may have changed its interface. Similarly, in-house produced graphic designs can be monitored in real time by the outsourced team. Integrating design tools with development tools gives an overall picture to all the teams working on that project.

For the development and testing phase of a project, sprint planning can be undertaken using tools such as Visual Studio online or Trello. Daily communication can be handled via Skype or ticketing systems like Jira depending upon the strength of the team. Documentation needs to be set in stone, reviewed and agreed, before beginning the development cycle for it. Setting up processes such as two-week sprints with actual deliverables or continuous deployment with asynchronous but agile feature releases and daily standups to discuss and follow up on past and current tasks help form an advancing process with visible results. Annual or bi-annual physical meetings should be an integral part of the outsourcing process as they help reaffirm the trust and faith in the working and operations of the outsourcing unit.

5.2 Further Research

Taking into account the information mentioned as part of the limitations sections, the further research section aims to expand the possibilities within this research that could lead to more in-depth analyses. These could be future paths that could be tread as part of this thesis or could spawn into a new research topic of its own. The research doesn't take into account a lot of factors that could possibly alter the data, model and even the results themselves. The topics discussed within the thesis will be deliberated on in this section, indicating what is missing and what could extrapolate the data.

The cultural aspects of outsourcing are mentioned in the first part of the literature review. While these look at the cultural side of things, the data doesn't cater to a varied level of demographics within the culture itself. For example, experience, education, age, gender were not considered and could shed more light on cultural impact on outsourcing. Also, changing geographical location could see if the data holds true on a more global scale.

Even though a deliberate emphasis or restriction wasn't placed on IT companies, the nature of the data and interviews restricted the research to IT companies primarily, whereas a different industry could possibly require different data. Further research could aim to understand the 'commonness' of using outsourcing services that could span across multiple industries. Moreover, the companies interviewed have a more entrepreneurial nature and can be classified as startups, so extracting data for large scale companies could further the research question.

The interviews done with the various companies only represent a fraction of the spectrum of outsourcing. Additional data from companies that have failed with outsourcing (only one was mentioned in this thesis) could balance the research and guide the hypothesis in a different direction. Also, due to the type of theoretical framework chosen, the research results were primarily from qualitative analyses. Altering the theoretical framework to have a more inductive or a completely empirical approach or even a quantitative analysis would shed new light on the research.

The tools section as part of the literature review and analysis sections is taken in a given point of time. With the extreme growth of technology in the recent years, future studies could research how next generation technology like holographic displays¹⁸, virtual reality gadgets¹⁹ and instant real time translations²⁰ could ease current communication problems between teams.

¹⁸ <https://www.microsoft.com/microsoft-hololens/en-us>

¹⁹ <https://www.oculus.com/>

²⁰ <http://www.skype.com/en/translator-preview/>

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Appendix

This section contains the list of questions that were asked in the interviews. There were two different templates with similar questions for both the buyers i.e. the Norwegian companies and the suppliers i.e. the outsourcing providers. Sub questions that were asked individually in each of the interviews to gain more insight into the answers are not added to the template below.

Interview Questions List - Norwegian Companies

1. Can you give a small introduction about your company?
2. Can you explain in short, the current structure of the company?
3. How many resources are present in house and how many outsourced? (In percentages if need be)
4. What aspect of the company is currently being outsourced? If relevant, what is the average duration of a project outsourced?
5. What were the main reasons behind outsourcing that particular aspect? (If relevant, what were the investor's opinions on outsourcing this aspect of your business?)
6. How did you manage to find your outsourcing provider and did you verify their reputation? If yes, how? (E.g. Third party connection/founder connections?)
7. Which, if any, evaluation tools/criteria were used to recruit the outsourcing provider?
8. What were the main differences seen pre and post-outsourcing?
9. How much time did it take to set up the whole structure?
10. In short, could you describe a regular day working with the offshore team?
11. What is the most used way of communicating with the outsourced team?
12. Is there someone local responsible for the offshore team and is someone offshore responsible for it as well?

13. Can you briefly touch on any problems occurring due to organizational difference, geographies and time difference, socio-cultural problems? How did you solve them?
14. Does the offshore unit participate in decision-making and development or do they only carry out tasks?
15. How does knowledge transfer happen from the in house team to the offshore team? Are you satisfied with it?
16. From a long term strategy perspective, is the outsourcing provider an integral part of your company plans? Is this discussed with them?
17. From a scale of 0 to 10, how satisfied are you with the implementation and results outsourcing provider?
18. In your opinion, is outsourcing an effective operational model? What are its main strengths and weaknesses?

Interview Questions List - Outsourcing Providers

1. A small introduction about your company and what kind of projects does it take?
2. Can you explain in short, the current structure of your company? (How many teams/departments/modules?)
3. On what factors do you decide (or what motivates you) to accept a particular project? How do you decide how many resources go to that particular project?
4. How do you deal with competition with other outsourcing firms?
5. What has been the difference between estimated and actual timeframes for past-outsourced projects? What has the main reason for the difference?
6. How did you manage to connect with your outsourcer and how did the setup for the pilot project occur? Did someone have to travel to the outsourcer and participate in knowledge sharing or did the company send representatives?
7. How much average time does it take to set up a working structure between the companies? What factors does this depend on?
8. In short, could you describe a regular day working with the host company?
9. How often do you meet the representatives of the host company?

10. What is the most used way of communicating with them? Is it effective and is there something that could improve it?
11. Can you briefly touch on any problems occurring due to organizational difference, geographies and time difference, socio-cultural problems? How did you solve them?
12. Does the offshore unit participate in decision-making and development or do you only carry out tasks?
13. How does knowledge transfer happen from the in house team to the offshore team? Are you satisfied with it?
14. From a scale of 0 to 10, how satisfied are you with the implementations and results provided to the parent company?
15. In your opinion what are the main strengths and weaknesses with regards to outsourcing?