

# Pricing Capacity-on-Demand in IT Services

An analysis of the development of unit pricing  
at Atos Origin



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## Summary

The objective with this thesis is to assist Atos Origin in their work on implementing Capacity on Demand. Atos Origin will be the first one on the market to introduce complete capacity on Demand making a great leap towards customer satisfaction and thereby creating a strong competitive advantage. This now needs to be capitalized.

So far only one contract is using Capacity on Demand and that is the contract with Schenker. When pricing the contract Atos Origin needed a new way to create a list of unit prices for all of the services, a condition for Capacity on Demand to work. They chose to work with transfer pricing models with a mark up in order to price the contract due to the flexibility that that model allows for. To make things more complicated Schenker is a very large customer and the pricing of the contract were very demanding making the same process unfit for the pricing processes in the future.

Our work started with analysing their pricing of the Schenker contract. The problem is that Atos origin does not know if the model they used for the pricing is the most profitable one. We have helped Atos Origin by assembling a list of actions and advice that may increase their profitability and improve their competitive advantage as well as see to that Atos Origin makes the most of their competitive advantage and turn it in to profit.

Analysing the work we saw that they had mainly been focusing their attention to the costs induced by the customers needs. We therefore chose to introduce another way of thinking – *value based pricing* which can help Atos Origin to capitalize their innovation and increase profitability. Secondly we saw a need for *customer segmentation* and we developed a strategy for segmentation after company size and demand. Thirdly we saw that they could optimize utility of hardware and demand by adopting *bundling* to steer demand. This would also divert risk in times of volatile demand. This will answer the question we asked in the beginning of our work: what does AO need to consider when developing a pricing strategy for future contracts using CoD in order to maximize profit.



## Table of Contents

Definitions .....	5
1 Introduction .....	7
1.1 Atos Origin .....	7
1.2 Recent History .....	8
1.2.1 The Products .....	8
1.2.2 Hardware .....	9
1.2.3 Software.....	10
1.2.4 Corporate structure .....	11
1.2.5 The clients.....	11
1.3 Disposition.....	12
2 Problem Description and purpose.....	13
2.1 Problem Analysis.....	13
2.2 Research Question .....	16
2.3 Purpose .....	16
3 Method.....	17
3.1 Formulating the problem .....	17
3.2 Gathering Information .....	18
3.2.1 Interviews .....	18
3.2.2 Literature studies .....	19
3.3 Quantified Methods .....	20
3.4 Validity .....	20
3.5 Reliability .....	21
3.6 Solving the problem.....	21
4 Theory.....	23
4.1 Pricing Theory .....	23
4.1.1 Capacity on Demand .....	24
4.1.2 Cost based pricing versus Value based pricing .....	24
4.1.3 Service Pricing.....	25
4.2 Cost Based Pricing.....	25



4.3	Value based Pricing .....	27
4.4	Methods for Value Based Pricing.....	29
4.4.1	Three part non linear pricing .....	29
4.4.2	Other aspects of pricing .....	30
4.4.3	Customer Segmentation.....	33
5	Empiric study.....	34
5.1	The Transition to Capacity on Demand.....	34
5.2	Non Capacity on Demand Pricing Strategy.....	34
5.3	Pricing Capacity on Demand.....	35
6	Analysis .....	37
6.1	Part one .....	37
6.1.1	How was transfer pricing implemented in the Schenker contract? .....	37
6.1.2	Transfer pricing systems and AO .....	38
6.1.3	Why was transfer pricing chosen for the pricing procedure?.....	39
6.2	Part two.....	40
6.2.1	What does AO need to consider when developing a pricing strategy .....	40
6.2.2	Value-based Pricing.....	41
7	Conclusions .....	45
7.1	Value Based Pricing .....	45
7.2	Customer Segmentation.....	46
7.3	Demand management; Bundling and Risk .....	46
8	Literature .....	47
9	Figures and Tables.....	48



## **Definitions**

### **Capacity on Demand ( CoD )**

This term refers to the practice used when the customer only pay for the products and services actually used. This is not the case in all industries, for instance broadband internet and television.

### **Price list**

This refers to Atos Origins unit pricelist, which lists the cost per unit, for example one telephone call. They differ from customer to customer and the one we examine is the one connected to the contract with Schenker AB North.

### **Platform**

It is the underlying hardware structure or operating system, e. g. Intel.

### **Hardware / Software**

Hardware is the physical parts of a computer. It covers all from the keyboard to a whole super computer. The software is the programs that are run on the hardware, like operating systems or applications.

### **Unit Price**

It refers to the price the customer pay for each instance of service they buy from Atos Origin (AO). It could be a telephone call to the helpdesk or a gigabyte of storage space used for a database.



## **Computer-Centre**

It is the room in Stockholm in which most of the hardware is located. The room contains a number of super computers and other network equipment required to perform the services AO provides.

## **Capacity**

This term refers to all types of services, each representing some type of capacity. It could be for instance support or storage space.

## **PCK**

It is an abbreviation of Personal Computer “Komplett” and it is a PC that Atos Origin leases to the customer. The service contains backup, service, support and system updates in a package.

## **LAN / WLAN ( Switch)**

This is an abbreviation for Local Area Network and Wireless Local Area Network. Switches are the hardware used to relay information within the LAN: s and WLAN: s.

## **SLA**

The term means Service Level Agreement. It is a document that state what services the supplier should provide to the customer.



# 1 Introduction

*In this chapter we describe the underlying features of our problems, and give a more complete description of the company, its products and the company's recent history. To understand the complexity of the products provided and the transition that the company is undergoing we will describe the events leading up to the present situation. Since the development of a new pricing strategy is our main task we will focus on the strategy currently in use.*

## 1.1 Atos Origin

Atos Origin [AO] is a Dutch-based company providing and managing complete IT-services that are outsourced by other companies as well as consulting and systems integration services. AO has annual revenues in excess of 5 billion Euros and employs 47.000 people in 50 countries. In the Nordic region there are about 1600 employees mainly situated in Sweden. The personnel that have contributed with information and support for this work are located at the Borås, Malmö and Göteborg sites. AO is currently the largest actor in its market and they are quite unique in the complexity of the products that they provide. They are also early to introduce the complete Capacity on Demand concept and unit pricing of the services into this business.<sup>1</sup>

AO is interesting to examine because of the rare opportunity it gives us to analyse the first transition to Capacity on Demand pricing made in this market. Competitors are likely to follow in their footsteps and it is the novelty of this way of pricing that makes this so interesting.

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<sup>1</sup> "Atos Origin Nordic presentation" 2004-06-28



## 1.2 Recent History

The Gothenburg division of Atos Origin was earlier a part of SchlumbergerSema, a company created when Schlumberger, a company developing solutions for oil fields, purchased Sema group, an IT-services company, in 2001. Before that they were part of Stadskonsult Data, SKD, a Swedish government controlled consulting company.

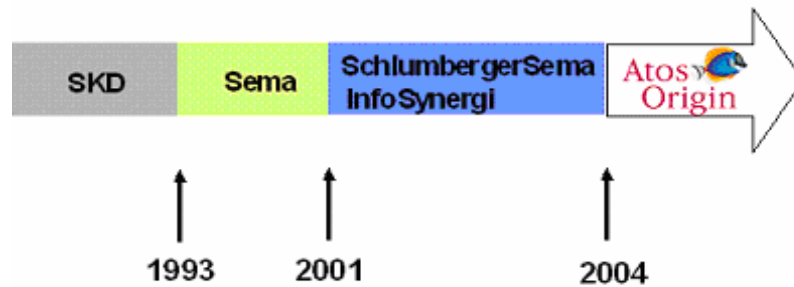


Figure 1. The history of Atos Origin in Sweden<sup>2</sup>

Within SchlumbergerSema there was a department developing Capacity on Demand [CoD] for the IT services SchlumbergerSema offered to their customers. While still under SchlumbergerSema the Gothenburg department renegotiated a six year contract with Schenker since the previous contract had expired. One demand from Schenker was Capacity on Demand, something that already was under development at SchlumbergerSema.<sup>3</sup>

### 1.2.1 The Products

Atos Origin's product portfolio consists of three fields; Consulting, Systems Integration and Managed Operations. Consulting involves doing specific tasks for the customers, such as software or hardware installations and services. Systems Integration is a larger task, which involves designing an entire computer system for the client. Managed Operations means that the whole IT-department of another company is outsourced to AO. Since the Consulting and Systems

<sup>2</sup> "Atos Origin Nordic presentation" 2004-06-28

<sup>3</sup> Interview, Anders Modig and Lars Björklund





Integration products can be regarded as included in the larger Managed Operations product we will not describe them specifically.<sup>4</sup>

Managed Operations outsourcing means that a customer buys a composition of for instance computer capacity, storage space, system backup, system support and software licenses. Every customer demands a certain amount of each part mentioned above, and the sum of those parts defines this product for that specific company. These parts render different costs respectively and should therefore be charged accordingly. The way this is done has so far been with a fixed fee. Some clients choose to only purchase one of the services and other all of them. A customer can choose some or all of the services offered depending on that customer's needs. Therefore no customers are alike, every customer needs a tailor-made solution consisting of both hardware, software and supporting services.<sup>5</sup>

Beside the computer capacity part AO also offers more basic services, which can be an expansion of a customer's own systems or additions to the platforms bought from AO. These extra services include extra storage, additional support or help desk availability, and printing and scanning services, database software, LAN or WLAN switches, Archive on line and remote access. Another solution offered to customers is PCK, which means that AO installs a personal computer, an ordinary PC, at the workplace. The service includes software installation, updates and support.

### **1.2.2 Hardware**

To perform these tailor-made services AO need extensive hardware. We will describe the dual effects of the transition to CoD both on the physical hardware structure and on the ability to price the services per unit and thereby achieve greater efficiency and profitability.

Before the transition to Capacity-on-Demand AO sold capacity in batches dependent on the size of computers offered on the market. This meant that each customer had specific dedicated hardware instances, ranging from a single computer to large clusters with separate storage

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<sup>4</sup> "Atos Origin Nordic presentation" 2004-06-28

<sup>5</sup> Interview, Anders Modig and Lars Björklund



facilities for backup information. This often led to excess hardware capacity which AO could not use and the customer had no need for but still had to pay for. This obviously is not favourable for creating customer satisfaction.<sup>6</sup>

AO is currently in the process of transitioning all capacity to “the Super Dome” computers in the Computer-Centre; which is the storage site in Stockholm. Physically this means that instead of many small customer-specific computers AO now has high-capacity systems that are easily upgraded by the addition of components into a large framework. This provides AO with a possibility to adjust their capacity into smaller increments, thereby lowering the overcapacity. The hardware that is inserted into the framework when more capacity is needed can be leased from other companies and thereby AO escapes the risk of those hardware investments and can get full coverage on most of the hardware in use.<sup>7</sup> This in turn shifts some of the hardware costs from fixed to variable or semi-variable costs for AO.

This use of modern technology allows AO to utilize their capacity in a more efficient way, allowing them to cut the costs of the excess capacity they had earlier. The new systems also require less maintenance. This gain is forwarded to the customers in the CoD system. This transition also means that AO can charge a customer only for the capacity used, increasing AO's competitive advantage and that AO can gain economies of scale, both from increased flexibility and utility of the systems, but also from the smaller physical size and smaller number of units.

### **1.2.3 Software**

The software used differs a lot from customer to customer. AO offers a range of different software depending on the customer's needs, for example different operating systems, different middle ware database programs and other, more customer specific, programs. Customers can also demand that certain programs are available, such as specifically created ordering software. The main problem for AO regarding software is the cost of licenses, since these

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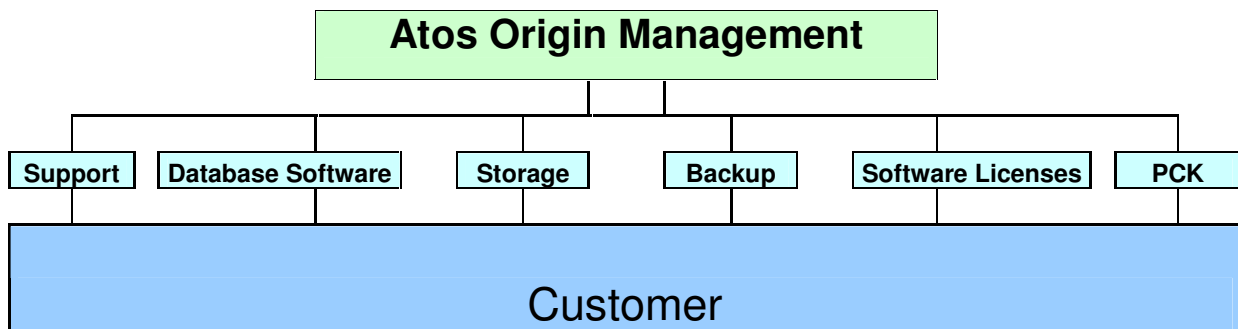
<sup>6</sup> Interview , Anders Modig and Lars Björklund

<sup>7</sup> Interview , Anders Modig and Lars Björklund

usually is bought at certain levels, for instance up to 20 users, or up to 100 users. This means excess costs if the customer only needs 25 licenses.

### 1.2.4 Corporate structure

On top of the corporate structure of AO is the management. They govern the work done in the subdivisions where in which each part of the services are produced. The structure can be viewed as shown below. The customers pick and choose from the services AO offers. The services are then batched together and summarized to create a tailor made solution to that customer to the need that the customer had. Each division has a unique cost structure making it difficult to apply one single method of pricing. This problem gets harder the more services and the more diverse the need is, and for the Managed Operations the correct pricing is very complex to calculate.



Figur 2. Customer Interaction

### 1.2.5 The clients

AO has a large number of small and medium sized clients, and 4 to 5 larger ones. The large companies are naturally higher regarded, and the smaller clients have smaller chances to affect in the price they are offered. Every contract is subject to negotiations, but large clients get better terms depending on the larger amount of serviced demanded and a higher degree of financial security. The level of profitability is set by the directives issued at a management



level and differ between different customers allowing a large amount of politics to affect the way the prices are set.<sup>8</sup>

### **1.3 Disposition**

In the following chapter we will describe the background to the problems, describing the company, the products they offer and the transition to Capacity on Demand so far. In chapter three we will describe the problem, defining the problems we intend to address, the purpose of the thesis. Chapter four describes the method we use to solve the problems and chapter five consists of the theoretical basis for our analysis. Chapter six describes the empirical and company specific information. The analysis is presented in chapter seven, leading to our conclusion in chapter eight. The final pages consist of our literature list and table of figures and tables.

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<sup>8</sup> Interview, Zoran Covic



## 2 Problem Description and purpose

*In this section we will describe, analyze and then define the problems that we intend to solve as well as outline the purpose of the thesis.*

### 2.1 Problem Analysis

AO now faces a situation where they have implemented CoD into one contract using transfer pricing to price the units of service for one customer, Schenker. Since the largest customer segments for AO is small to medium sized companies the way that the Schenker contract was priced is unfit for pricing future contracts due to the sheer workload that is required. This means that AO needs to find a way to price a contract that covers the fixed costs for AO but still gives the customer a competitive price and at the same time is standardized enough to be applicable to any smaller customer requiring a minimum of changes to be made. Competitors such as IBM, HP and SUN has made attempts at introducing different versions of CoD, but none have yet introduced CoD in a satisfying way.

On the global market CoD is being developed in different ways by companies such as IBM, HP and Sun. These companies are originally suppliers of computer capacity, and it is for these products they offer CoD. For instance HP has developed a unit-of-computing metric, the “computon”<sup>9</sup> that takes into consideration different types of capacity, such as network bandwidth or computer capacity. This method of measuring has met some resistance from potential buyers, since the method of calculating a company’s use in computons will be to complex and demanding for IT-managers to perform. As Tim Cronin, manager of IT at Nobel Biocare USA Inc., expresses it: "How in the world would you calculate all the variables?"<sup>10</sup>

Another of Hewlett Packard’s customers, Malcolm Fields, CIO at HON Industries Inc. expressed: "The last thing that we need is another complicated licensing scheme," Fields

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<sup>9</sup> Hoffman, T., Computerworld, 5/26/2003, nr. 21

<sup>10</sup> Hoffman, T., Computerworld, 5/26/2003, nr. 21



further said. "What we need is a quick and easy way to buy more computing power, and I need to be able to buy it in very small, inexpensive increments." <sup>11</sup>

IBM's offer of CoD means that customers in need of massive computing power sends the information to IBM, who processes it and makes the results available for the end users, while Sun's approach is to develop a Sun Power Unit<sup>12</sup>, similar to the computon.

These companies already offers a kind of CoD, in HP's and Suns case this means that some servers comes with extra processors installed, that can be activated when needed, and the customer is only charged for actual use. HP calls this service "instant Capacity on Demand", or iCOD and Sun just for Capacity on Demand. Several vendors, including Compaq Computer Corp., Sun Microsystems Inc. and HP, currently offer pay-as-you-go-type programs, but they typically are handled through the vendors' finance departments and are more like leasing programs than iCOD, vendors and resellers said.<sup>13</sup>

As described above the ventures into CoD by other companies have been unsuccessful. This shows that the transition into CoD is not an easy task, but the more companies that introduce or demand CoD the more common it will become. One major difference between for instance HP and AO is that a major corporation such as HP can force their providers to offer CoD in their turn, something AO is unable to do. Since AO offers different services and packages the situation is different to that at HP or Sun, since these companies a mainly providing the hardware, and not complete solutions. This difference, paired with an increasing demand for CoD on the market, may provide an opportunity for AO to create a pricing system using CoD that may work where others have failed.

The first company to offer CoD on the Swedish market will have a lot to gain, both in profits and customer satisfaction as well as in terms of market shares. That is why AO is keen on introducing CoD as fast as possible.<sup>14</sup> They will be the first ones to do so January first 2005.

As mentioned above one of the main concerns for purchasers of CoD is how the price is calculated, since a complex method increases the difficulty in calculating costs and making

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<sup>11</sup> Hoffman, T., Computerworld, 5/26/2003, nr. 21

<sup>12</sup> Hoffman, T., Computerworld, 5/26/2003, nr. 21

<sup>13</sup> Kovar, J. F., Computer Reseller News, 3/6/2000, Issue 884

<sup>14</sup> Interview, Zoran Covic



cost forecasts. This points out one of the major aspects of the main problem for AO, how to offer a simple enough pricing system, while still keeping the possibility for customizing contracts after customer specifications. It should be easy both for AO and for the customer to get a approximate cost and simple to add or remove services in order to get a service level and price that is optimal for each customer. Another important aspect that must be addressed is how the costs should be covered, since the initial cost must be distributed to the customer somehow, while still maintaining a competitive price.

Another aspect that is important mainly on AO:s behalf is that the development of a new contract with CoD should be fairly simple, since the main clientele is small to medium-sized companies, and if the creation of each contract is costly and time-consuming the aggravated costs will be fairly large.

The process of pricing includes many aspects and decisions other than the purely mathematical ones. An example of this is the political implications that may play an important roll when determining the price. Each company has its own policies, politics and other factors to take into considerations and it is important to understand them when developing for future pricing strategies.



## **2.2 Research Question**

### **The main question**

- What does AO need to consider when developing a pricing strategy for future contracts using CoD in order to improve profit margin?

In order to find an answer to our main question we will begin with answering some underlying questions, and from answering these we will find parts of our final solution.

### **Underlying questions**

- How was transfer pricing implemented in the Schenker contract?
- Why was transfer pricing chosen for the pricing procedure?
- How has the other aspects of pricing affected the pricing procedure of the Schenker contract?

## **2.3 Purpose**

The purpose with our work is to give suggestions for AO on how to complement their pricing strategy.





### 3 Method

*Here we will present the method we have used. We will describe the method we used during our collection of data, and also address the validity and reliability of our text.*

#### **3.1 Formulating the problem**

According to Booth et al<sup>15</sup> the process behind determining a research subject and formulating a question is as follows:

1. Find an interest in a broad subject area
2. Narrow the interest to a plausible topic
3. Question that topic from several points of view
4. Define a rationale for the project

In order to find a suitable subject we first discussed with the company we are writing in cooperation with, AO, what they saw as their main problem, and this was how to correctly and effectively price Capacity on Demand. This gave a general idea of the problem, and determined a subject area. In order to get a problem of manageable size we narrowed the problem down to a plausible topic, which then became our research question, namely “what does AO need to consider when developing a pricing strategy for future contracts using CoD in order to maximize profit?”

After deciding on a set of questions we had to examine our problem definition from different views, to see if it was the correct questions to answer, if the answer could lead to a solution to the larger problem, and if it was a suitable task to handle in this paper. Analyzing the process behind the pricing of the Schenker contract could lead us to find a good way to price Capacity on Demand for AO, and that information could be used to easier determine a pricing strategy for future contracts.

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<sup>15</sup> Booth et al, 1995



A problem definition should be “exiting, fruitful and simple.”<sup>16</sup> We find all of these criteria in our problem; it is exiting because of the novelty of the problem, with AO being the first in their market to implement CoD. We think that it would be fruitful, since an answer to our question could in extension lead to a solution for the larger problem, how to correctly price future contracts, and the problem definition is simple, in the definition that it is easy to grasp, but maybe not to solve.

### **3.2 Gathering Information**

The main distinction to make is between qualitative- or quantitative-based research. According to Holme and Solvang<sup>17</sup> “Qualitative methods can be regarded as a collection of procedures that more or less combines the following five techniques: direct observation, participating observation, informer and responder-interviews and source analysis.” The other approach is quantitative, meaning that the researcher works with numbers and countable data to reach a conclusion. Positivistic research is similar to quantifiable methods, and hermeneutic to qualitative.

Our approach is mainly qualitative, since the information we work with is of a non-quantifiable type and we must draw our own conclusions based on our understanding of the problem and the data. Since we strive to find a solution to an actual problem we will be working empirically rather than textual, which means that we must adjust our data and theories to the actual problem in order to find what is applicable and which assumptions we must make ourselves.

#### **3.2.1 Interviews**

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<sup>16</sup> M. Holme, B. K. Solvang, 1997

<sup>17</sup> M. Holme, B. K. Solvang, 1997



As mentioned our first interview was with the controller of the Schenker account and the site manager. This interview had the form of an informant-interview<sup>18</sup>, which means that the questions we asked were wide, so that the interviewees could talk more freely. This enabled a more free communication, where we asked follow-up questions when we felt that we needed more specific information on a certain subject. In this interview we got basic information about AO, and also a description of the problem and its background.

Having done some literature-studies we returned to AO to have a second interview, this time with the creator of the first price list, Zoran Covic, in order to get more specific information on the problem and the process behind the creation of the Schenker contract. This was initially supposed to be a responder-interview, where we ask more specific questions, but soon turned into an informant-interview when we felt that we got more and better information if we let Zoran describe in his own words than we would get with direct questioning. Another benefit we gained was that we got information on subjects we might never have asked about. Since our analysis of the work behind the first price list is based solely on that information given by Zoran this demands that we are attentive to the subjective nature of that information.<sup>19</sup>

When most of the structural work was done, such as describing the background and theories, we had a follow-up interview with Zoran, where we asked some additional questions to make sure we had understood the information given in the first interview. We also described how we intended to address the problem more thoroughly in order to get an opinion from the one we felt had the most insight in the problem. This interview had the form of a responder-interview since we had some specific questions we wanted answers to.<sup>20</sup>

### **3.2.2 Literature studies**

After deciding on a problem our next step was to assemble the information to establish a greater theoretical knowledge of the main problem. We began with searching for information

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<sup>18</sup> M. Holme, B. K. Solvang, 1997

<sup>19</sup> M. Holme, B. K. Solvang, 1997

<sup>20</sup> M. Holme, B. K. Solvang, 1997



at the economic library at Gothenburg University. We had to decide on which books to choose and which to leave out. This was determined by evaluating the origins and purpose of the texts, the actuality of the texts, and by assessing their potential value to us, in accordance with the way described by Holme and Solvang<sup>21</sup>.

After skimming through the books we found we ended up with fewer, but more applicable sources. We consulted different more generic books on the subject of service price management, in order to present the basic theories in this field. This research gave us secondary and sometimes tertiary information about the mechanics of service pricing and service price management. We also noted that many of the books we choose not to use gave the same information as the ones we chose, which means that the information is more reliable.

We also acquired information from articles in economic and computer related magazines. This is also both secondary and tertiary information. We prioritized articles from renowned economic journals, since we felt that the information given in those had more validity in the economic field, but we also searched for information in computer-related magazines, whose validity is greater when it comes to the physical reality behind our problem.

### **3.3 Quantified Methods**

Initially we had hoped to add quantified information by doing a cost analysis on the company. We soon discovered that this was impossible, in part due to the sheer amount of work required, and part due to the secretive nature of that information. Other than that it has been hard to find ways to quantify the problem, since the main aspects of the problem are uncountable and often determined by personal preferences or other non-quantifiable reasons.

### **3.4 Validity**

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<sup>21</sup> M. Holme, B. K. Solvang, 1997



The validity of our data depends on our sources, and our interpretation of the data given by those sources. Our data has a high degree of validity, since it either comes from texts written by people knowledgeable in their different fields or first-hand from people in the project at AO. High reliability can be reached when many sources give the same conclusion<sup>22</sup>, and on the economic side this is true for our information. When it comes to the empirical part of our problem the validity is mostly dependent on the informant, and since we have fewer resources on that subject we must be more critical in our interpretation to make sure that there are no misunderstandings or misinterpretations.<sup>23</sup> Much of the information given from AO is given from a single source, but we have used other persons at AO to validate the information where it has been possible.

### **3.5 Reliability**

When it comes to the subject of reliability we must critically examine our conclusions drawn from the information. No matter how valid the information is, if we draw the wrong conclusions we end up with faulty results<sup>24</sup>. Since no sources found disagree with the ones used there is a reliable ground of information. We also have a good understanding of the problem and the gathered information, both in the theoretic aspect and about the actual problem, and thus are less inclined to make erroneous conclusions. These factors should imply that we have a high degree of reliability. In order to maintain a high reliability during our work we let our informants' proof-read our work in the final stages to remove any discrepancies that might have appeared.

### **3.6 Solving the problem**

As described above the first step we took was to gather information, both from texts and by interviewing persons at the company. After the initial information gathering we set together a basic structure for our paper, in order to get a clear picture over where we wanted specific

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<sup>22</sup> M. Holme, B. K. Solvang, 1997

<sup>23</sup> M. Holme, B. K. Solvang, 1997

<sup>24</sup> M. Holme, B. K. Solvang, 1997



topics. After that the first draft was written, where we collected the information gathered so far and structured it according to our disposition.

To solve the problem we began to analyze the development of the price list for the Schenker contract and the method used there, Transfer Pricing. We compared the work done to textbook theories on transfer pricing to determine if the method was used in the proper way. The comparison with transfer pricing required us to process information about the theories about that model, exposing us to the subjective thoughts of the authors of that information. We had to compare different views on transfer pricing in order for our analysis to be valid.

In order to answer the following questions we must evaluate transfer pricing and the applicability of that model in AO. We compared that method with other applicable / comparable methods in the area. This creates a natural limit for us, since we can't learn if that method is the best one, only if it is the best one of the ones we compare it with. But the task of comparing all the theories in the field is much too large for a paper of this size.

When we had developed a basic structure we divided the customers into segments. For each segment we developed a suitable strategy that suggests an approach for the person responsible for the contract on AO's side. This segmentation was a way for us to create standardized customers, so that we could calculate different ways to cover fixed and semi-variable costs and get an appropriate overhead and payback-time. The final segmentation and our suggestions then was discussed with AO in order to verify that the assumptions we had made was viable, since we could not get exact information about specific costs and demands for overhead, this being company secrets.



## 4 Theory

*We will categorize the theories in this chapter into three different categories. First we introduce theories on pricing and then the cost based pricing models and finally the value based models.*

### 4.1 Pricing Theory

The basis for pricing strategies consists of three separate entities; costs, competition and value to customer. The costs and the value to the customer create a pricing range. This range must also take into consideration the prices offered by competitors to find the final pricing range. The most difficult one to calculate of these three to determine is customer value, since value is perceived differently depending on what it is the customer seeks. As stated by Lovelock; “net value [] is defined as the sum of all the perceived benefits minus the sum of all the perceived costs.”<sup>25</sup>

Lovelock also lists three different bases for pricing; revenue oriented, operations oriented and patronage oriented. The major difference between these three is the goal strived after, Revenue oriented is profit seeking, striving to maximize income or to cover costs, Operations oriented strives to maximize the utility of the productive capacity and patronage oriented strives to maximize the number of customers served.<sup>26</sup>

In our case the revenue oriented pricing is most applicable since this approach strives to maximize income over expenditures which are the most common strategy for private enterprises. One could also argue for the operations oriented approach, since AO strives to minimize excess capacity, but since the final goal is profits revenue oriented is the most fitting approach.<sup>27</sup>

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<sup>25</sup> Lovelock, 1996

<sup>26</sup> Lovelock, 1996

<sup>27</sup> Lovelock, 1996



To summarise, the decision process behind determining a pricing strategy is not only to set a price, but also involves what should be offered at that price, and how payment should be handled.

#### 4.1.1 Capacity on Demand<sup>28</sup>

Capacity on Demand (CoD) is a term used for situations when the price the customer pays is totally dependent on the amount of capacity of service that customer has used during a period. This is very common in the telephone and electricity industries. However the opposite of this is found in the television and broadband internet industries where the time watched on TV or the amount of time or bytes surfed on the internet has no bearing on the cost for the customer. The marginal usage are in these cases cheap or even free.

Most companies strive to minimize their fixed costs. This makes them more flexible and better fit to survive hardships. It is therefore a great benefit for the customers to be able to move these fixed costs to variable costs or semi-variable costs. This extra benefit will give the customers an increased customer satisfaction and it will give AO a competitive advantage that they easily can capitalize on until competition introduces CoD to.

#### 4.1.2 Cost based pricing versus Value based pricing

The difference between Cost based pricing and value based pricing is that in cost based pricing it is the providers costs of production that is the fundament for the price, while in value based pricing it is the perceived value for the customer.

##### Cost based Pricing

Product → Cost → Price → Value → Customer

##### Value based Pricing

Customers → Value → Price → Cost → Product

Figure 3. Cost based Pricing vs. Value based Pricing<sup>29</sup>

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<sup>28</sup> Kotler, 2004





### 4.1.3 Service Pricing

An attribute that is unavoidable when discussing services is that they can not be inventoried or stored for use at a later time. When selling services the product is created and consumed simultaneously even though some instances of the service might be storable, it is the service experience that is the main product, and this can not be created beforehand. This means that the usage of services is directly dependent on when the customer requires the service, and that the necessary capacity must be available when needed. This usually results in situations with low utilization and hence overcapacity.<sup>30</sup>

## 4.2 Cost Based Pricing<sup>31</sup>

Transfer pricing is first and foremost a tool for distributing costs between different divisions within a company. That makes the model a cost based one. Most companies have divisions that each provides a needed service in order to produce the product of the company. Large companies for instance have IT service departments, payroll departments and staff administration departments. All of them are not producing the goods or service that earns the company this money. Still they cost resources to run. The costs must be forwarded from the service departments through production to the customer. In transfer pricing the costs of a division of a company are transferred from that division to another, hence the name.

The concept of transfer pricing is primarily used to distribute costs between divisions and not to price the final product of the company. However it can be used for that purpose and that is a part of the problem that our analysis will deal with. The transfer pricing principle allows for many varieties. There are five ways of categorizing transfer pricing systems.

*Market based transfer prices* are set by comparing what it would cost to purchase a similar service or product externally from another company on the open market. The costs of the supplying division are thereby neglected. This way the department becomes almost like a

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<sup>29</sup> Nagle & Holden, 1995

<sup>30</sup> Kotler et al, 2002

<sup>31</sup> Drury, 2004



separate company with prices that follow the changes in the market due to the supply and demand. This method is inappropriate for cost analysis and performance evaluation purposes since a profit or loss is included in the result of the division.

*Marginal cost transfer pricing* sets the price based on the marginal costs of the service performed by the supplying department. Economic theory indicates that this method maximizes the company efficiency the most when the trade is conducted within two departments of the same company. The receiving department will continue to buy the service until the marginal revenue equals the marginal cost of the service. This way departments optimize the total output of the company and its profitability.

*Full cost transfer prices* are based on the total costs of the department are when run in the long run. This gives the department full coverage for all of the costs but yield no profit.

*Cost-plus a mark-up transfer prices* are determined the same way as the full cost transfer prices with the difference that this time a mark-up allow for a profit (equivalent to the mark-up) to be made on department level.

*Negotiated transfer prices* are set by negotiations between the supplying departments and the receiving departments. The costs are like the market based prices neglected and allow for a profit to be made.

Creating and managing capacity is the main cause for costs in the service industry. This leads to high fixed costs and low variable costs and thus a high attributable value to incremental customers. If we compare this to the manufacturing industry where the ratio of variable costs to fixed costs involved in manufacturing a product higher, since there are raw materials and similar expenditures that is specific per unit, while in the service industry the cost of performing additional services often is small compared to the initial costs since the capacity is there, and for example the personnel still costs money even when not performing services for customers.<sup>32</sup>

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<sup>32</sup> Bateson, 1996



Costs can be any one of three different types; fixed, semi-variable and variable. Fixed costs are those costs that the company would still have even when performing no service. Semi-variable costs are variable within certain ranges, but rise in large increments between these ranges, for instance when extra investments must be made in machinery to reach a higher level of production. Variable costs are directly related to the produced volumes and can often be calculated per unit. The final cost of a product often consists of all of these types of costs, and all costs must be covered in order to make a profit.<sup>33</sup>

As Bateson argues, the relevant costs to consider when discussing services are the “uniquely attributable costs”, costs only induced by creating the specific product. To determine the unique cost of a product the whole production chain should be studied by beginning with the smallest unit and then tracing costs through the different production steps, identifying which costs are joint costs and which are unique for the product. The further up the process we look the fewer unique costs there will remain. This shows that the actual price floor for many services is low and hence the costs per new product is small compared to the fixed costs, assuming there is extra capacity available.<sup>34</sup>

### **4.3 Value based Pricing**

The main difference between value-based and cost-based pricing is, as can be understood by the names, which aspect that is the basis for the price. Introducing value based pricing does not replace cost based pricing. The main goal of this method is to take advantage of the opportunities for the company to charge their customers more for the same products without losing sales. This is possible in situations where the perceived value of the product is substantially higher than the cost based price.

The figure below indicates the value based pricing process starts at the end of the cost based pricing process. This means that rather than calculating the production cost and add a profit margin and thereby arrive at a price of the product, value based pricing focuses on the possibility of lost profits between the third and the fourth step in the cost based pricing

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<sup>33</sup> Lovelock, 1996

<sup>34</sup> Bateson, 1996



process. Starting at the end and do it the other way around allows for the pricing to reach the optimal level of profit rather than the conventional.

This method is particularly useful in situations where the supplier is first on the market or in the segment to introduce something that the customers perceive as high value. The perceived higher value in the company's product should naturally also be mirrored in the price. The cost based price should still be there as the lower limit to the price so that profitability persist.

The price of a service can be set within a range determined by the costs for the company selling the service on the low end and the price dependent demand of the customer at the high end. A problem encountered in determining the actual price range is the difficulties involved in calculating the actual cost. The unique cost per unit is low compared to the fixed costs, and this means that the marginal revenue for additional customers is high related to the marginal costs.<sup>35</sup>

A service firm should strive to sell its products as close to the customers' reserve price as possible to maximize profits, but as described above the marginal profit of additional customers is high. This means that there is a possibility to sell at a lower rate during low utilization periods and still make a profit, but this option is only available if price discrimination is possible. This means that a different price is offered to certain customers or during certain times. When stuck with excess capacity a company also can reduce losses by selling at a low price to cover some of the costs.<sup>36</sup>

Pricing can be used to affect off peak demand in two ways, by creating new demand in off peak situations and by flattening peaks by transferring customers from peaks to low utility periods. The goal of price-based demand management is to premier customers purchasing in low utility situations.<sup>37</sup> The demand of a customer is dependent on the price offered to the customer, in accordance with the price-demand curve. How the change in price affects the change in demand is known as price elasticity. If a small change in price severely affects demand the product is price elastic, and if the affect on demand is low its called price

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<sup>35</sup> Bateson, 1996

<sup>36</sup> Bateson, 1996

<sup>37</sup> Bateson, 1996



inelastic. When formulating a pricing strategy there are some issues to take into consideration. A main point is naturally how much to charge, since this determines the customers' level of demand. Other important questions to address is what the price should be based on, and the how, where and when on collecting payment.<sup>38</sup>

#### **4.4 Methods for Value Based Pricing**

To create bundled offers of service there are some different approaches. One important choice is which type of bundling should be used, *pure* or *mixed* bundling. Pure bundling means that the services is not sold separately, and mixed bundling gives the customer the choice to buy only part of the bundle. The goal of bundling is to acquire extra sales by discounting add-on purchases. Another advantage of bundling is to lessen the diversity of customer demands while keeping the opportunity to price discriminate to manage demanded capacity. By offering bundles customer that only would have purchased part of the services can be coerced to buy more, and buyers that would not buy at all can be lured by offering price discounts on bundles. The choice of bundles depend on the objective, wither it is to acquire additional customers or increase sales to earlier customers. On the customer side bundling can increase customer satisfaction by adding complementary services, reducing the cost of searching for new distributors or strengthen the perceived image of the company.

##### **4.4.1 Three part non linear pricing<sup>39</sup>**

This method is suitable for products that consist of one part fixed fee and an additional cost for every extra service or unit bought. The variations are several. The fixed fee could correspond to a certain level of a number of different services or be an entry level fee that the customer pays regardless of the consumption of capacity. If the fixed fee corresponds to a service level the customer is charged only for the capacity used above the service level and credited for the capacity unused. The additional costs of capacity could be linear or non linear,

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<sup>38</sup> Lovelock, 1996

<sup>39</sup> Wilson, 1993



the latter giving customers consuming large amounts of capacity a discount and thereby giving smaller customers incentives to increase their use of more capacity.

This pricing method is much like the ones used in electricity billing and by telephone companies. Both often have a fixed fee and an additional cost for every second talked or kilowatt used. Some mobile telephone operators charge a fixed fee but let that corresponds with a certain amount of service or amount of time that is included in the fixed fee.

#### 4.4.2 Other aspects of pricing<sup>40</sup>

When pricing a product you need to take many factors into consideration. Kotler divides them into internal and external factors. Starting with the *internal factors* he points out four different ones.

*Marketing objectives* includes the company's positioning on the market in terms of leadership roll and customer base. Other factors included are the objectives in form of profit maximization, market share maximization or product quality leadership.

At AO the main customers are small to medium sized companies. AO is now trying to get ahead of competition by introducing a much more elaborate level of CoD than the attempts made by the competitors. AO is not trying to create a competitive advantage by having the lowest prices but rather through the way that they charge the customer. Although we do not know it for sure we believe that AO is trying to maximize profit.

*Marketing mix strategy* is the term for the combination of price, product, place and promotion that the company has chosen. This indicates that the firm has to consider the impact on all four parts when changing one of the four p's. With other words the price needs to be corresponding to the strategy of the company in terms of the type of customers targeted and how they are targeted.

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<sup>40</sup> Kotler, 2004



We could not get sufficient information on the marketing mix strategy from AO but we draw conclusions based on the information we have. By introducing CoD they make an attempt to be leaders in terms of how the prices are set and not by the setting the prices as low as possible. The product is not very different from the ones offers by competitors and it is just the small extra services such as printing and scanning services that may be something that sets them apart.

*Cost* is perhaps the most obvious factor that needs attention in a pricing situation. Cost come in different ways, fixed, semi fixed and variable. The percentage of the total costs that are fixed and semi fixed affects the way the product should be priced and is closely connected to the strategy of economies of scale.

This is a very important factor for AO and they have focused their attention mainly on this area. As described earlier AO made an elaborate calculation of the costs before setting the price. The costs sets the base of the price and the other factors came in after that.

*Organizational Considerations* may be an important factor in terms of where in the company hierarchy the prices are set. The larger the risk and uncertainty the higher in the hierarchy.

When pricing the Schenker contract the final decision was made by top management since it was a large and important contract and they would have to stick with it for several years. A great deal of uncertainty is always involved in long term contracts with fixed prices such as the Schenker contract, therefore the decision on the pricing and profitability came from high up in the hierarchy.

We move on with the *external factors* that affect the prices of a company. Kotler points out three different external factors.

*Market and demand* plays a part in the pricing. Naturally it affects the prices in the business if it is a monopoly, oligopoly or a pure competition on the market.



The oligopolistic structure of the supply side of the market leaves AO exposed to the changes and moves made by the competitors. That was made obvious when WM-Data Offered a contract to Schenker.

*Competitor's costs, prices and offers* are an extra important factor in an oligopolistic market such as the one AO is in. Moves by competitors have more impact here than in other businesses.

One major aspect was that WM-Data also competed for the account, and thus AO had to offer better conditions than the competition although they did not know what WM-Data offered.

*Other external factors* that may impact pricing according to Kotler are whether it is boom or recession, the inflation rate and interest rates. In addition to them one should also consider legal and social concerns.

In the case of AO the inflation rate and interest rates are the most important factors. Since the contract is for an extended period of time AO are subjected to fluctuations in both. The most harmful would be an increasing inflation rate.





### 4.4.3 Customer Segmentation

According to Tellis<sup>41</sup> there are three classes of pricing strategies; differential pricing, competitive pricing and product line pricing. There are also three categories of consumer behaviour; those with high search costs, those with low reservation prices and finally the transaction cost that each customer experiences. These two dimensions, firm objective and consumer behaviour can be plotted in a 3x3 matrix that is shown below.

<b>Characteristics of consumer</b>	<b>Objective of firm</b>		
	Vary Prices among consumer segments	Exploit competitive position	Balance pricing over product line
Some have high search costs	Random Discounting	Price Signaling	Image Pricing
some have low reservation prices	Periodic Discounting	Penetration Pricing Experience Curve Pricing	Price Bundling Premium Pricing
All have special transaction costs	Second market discounting	Geographic Pricing	Complementary Pricing

Figure 5. Customer Segmentation<sup>42</sup>

<sup>41</sup> G. J. Tellis, 1986

<sup>42</sup> G. J. Tellis, 1986



## 5 Empiric study

*In this chapter we will go further into the empirical part of the problem in order to understand the implications.*

### **5.1 The Transition to Capacity on Demand**

It is becoming more common for customers to only pay for what they use. Suppliers of electricity and telephone services only charge their customers for the capacity they use but providers of IT-services do not. Yet the most logic step for an IT-company to take is to introduce CoD into this sector as well since it is becoming more common on other markets and it is profitable for both customer and supplier<sup>43</sup>. This is where AO stands today.

Another strong argument for CoD is the fact that customers are demanding it. As one of our contacts at AO expressed it; “the customers want three things; they want to buy solutions, not items, they want a determined level of service at all times, and they want us to take the risk, so that if a subcontractor fails, or the internet cable is severed for instance, we pay for their lost income”<sup>44</sup>.

### **5.2 Non Capacity on Demand Pricing Strategy**

The platforms are sold at three different levels of service; level 1 are small systems for customers who want to develop software or have a low level of usage. Level 2 is aimed at low to medium demand customers, and comes with a low level of support and similar extras. Level 3 is the most complete service, delivering high capacity with options for full support, storage of backup and so on.<sup>45</sup>

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<sup>43</sup> Interview, Zoran Covic

<sup>44</sup> Interview, Zoran Covic

<sup>45</sup> Interview, Zoran Covic



The current strategy is in comparison to many other businesses rather old-fashioned. AO sells their services in contracts over a certain period of time, normally a number of years. It is the price stated in that contract that will be the price during the whole period. This forces AO to maintain a large hardware capacity not knowing if they will use it or not. This is of course an expensive and inefficient use of resources. This very rigid way of pricing allows for little or no flexibility, both for customers and for AO themselves. Customers demand for capacity is hard to estimate and fluctuations in demand make an estimate of future demand difficult<sup>46</sup>.

The small flexibility imbedded in this system is the way service levels are used to differentiate customers. Certain systems are sold in three levels, in order to get some flexibility. This still does not quite make it in an era where telephone is billed by the second and electricity by the kilowatt. Customers expect to pay for their IT services in the same way they pay for their telephones and the electricity they use, not having to take into consideration anything more than the price of the service<sup>47</sup>.

### ***5.3 Pricing Capacity on Demand***

Introducing CoD has impacts on the hardware structure as well as the methods of pricing. This means that AO now has to produce a price list that defines the prices of each of their products. These prices have to cover the costs related to the respective product making it a cost based pricing model.

CoD shifts the risk from the customer to AO. The principle that all fixed cost must be covered by fixed revenues is thus invalidated. The new technology allows AO to gain control over the hardware. Fluctuations in demand can more easily be managed by AO decreasing the risk involved in the investment.

On a global scale large companies like IBM and HP can force subcontractors to deliver at a specified price can offer pure CoD since they move the risk to the subcontractors. AO is not a price-setter in that respect, so they must accept the market price on purchased goods and

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<sup>46</sup> Interview, Zoran Covic

<sup>47</sup> Interview, Zoran Covic



services. This means that AO must set a price that factors in the risk involved in the transaction. AO is lobbying and using their bargaining power to be able to purchase capacity in smaller batches, to further minimize excess capacity. Since the concept is relatively new on the market the subcontractors are still in the old pricing system and this force a larger amount of risk on AO.<sup>48</sup>

However there are progress being made, and since the major companies, such as HP and Sun have begun to show interest in CoD it will probably mean that the market will adapt, and more providers will offer more flexible pricing strategies.

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<sup>48</sup> Interview, Zoran Covic



## 6 Analysis

*In this section we will make the analysis of the problem and apply the theories in order to solve the problem by answering the questions stated in chapter three. We will answer the main question by first answering the sub questions.*

### 6.1 Part one

#### 6.1.1 How was transfer pricing implemented in the Schenker contract?

AO chose to use the transfer pricing model as a starting point for their work. The model can be used in various ways and allows for combinations of different ways which can be useful when making a tailor-made solution. AO had a very delicate situation at hand with the pricing of the Schenker contract and they felt a need to make sure that the model used was flexible enough to allow for changes to be made to fit the contract.

The method that is the one that best reflect the way the cost analysis was made is the marginal cost transfer pricing. In theory this does not yield any profit but one could add a part of a different transfer pricing system and add a mark-up profit margin. This is the one method that most closely resembles the one adopted at AO.

First the marginal cost was calculated for every product and every level of demand and then a mark-up profit margin was added. In the service level agreement Schenker had stated what needs they had for every product and AO calculated the marginal cost at that level of demand and added the mark-up to know what they should charge Schenker. This excludes the possibility for AO to charge Schenker more for the products that they perceive as cheap or very valuable.



### 6.1.2 Transfer pricing systems and AO

One can argue that each of the transfer pricing models have been used at AO to some extent. For instance one could say that the prices on the price list are market prices because they are set on the market under competition with other actors. However one could also say that they used negotiated transfer pricing because they negotiated with the customer. Either way none of them are applicable on AO due to the fact that there are other methods that are more applicable. We will now take a closer look at the implementation of transfer pricing into the Schenker contract.

The system most closely resembling the one adopted by AO is the cost-plus a mark-up transfer pricing system. The mark-up would in this case correspond to the profitability level given by management.

There are many factors to consider when determining the price of the product and every company has their unique factors to take into consideration before setting the price. We have together with AO come up with a number of factors that are important for AO when determining the price of CoD<sup>49</sup>;

- Incremental costs
- Demand
- Politics and goodwill
- Customer characteristics and history
- Risk diversion
- Capacity requirements and the way capacity is purchased

#### **Other factors to consider**

Other important aspects are the *size and the length of the contract*, and *previous connections with the customer*. In Schenker's case the fact that the final contract was for a longer period of

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<sup>49</sup> Interview, Zoran Covic



time than the initial offer stated was an incitement for AO to give Schenker additional benefits since this guaranteed an income for an extended period of time. Since Schenker had been a customer previous to the negotiation AO already had experience in handling the demands that Schenker had, and thus had a competitive advantage over WM-Data. This also meant that Schenker knew that AO would deliver what they promised, which was an additional security for Schenker.

*Politics* also played a major part in the negotiations, since a large contract like Schenker's may show other potential customers that AO is a reliable and secure option when it comes to outsourcing whole IT-services or just purchasing parts of them.

### **6.1.3 Why was transfer pricing chosen for the pricing procedure?**

The main demand on Schenker's behalf was that the contract should be priced according to CoD. In order to get a price for Schenker that would cover all costs AO calculated the costs induced at each level of usage from the bottom and up, and these calculations were entered into a spreadsheet giving the total cost, allowing AO to create scenarios for different levels of demand. They also had to take into consideration the demands from the Dutch main office to cover a set overhead on some services, such as support. From these calculations AO could offer Schenker a price that they know would cover their costs at any given level of usage.

While negotiating with Schenker different pricing strategies were discussed, for example that different ranges of usage would be priced differently. Schenker also argued that they should not have to cover the initial costs since the capacity would be used towards other customers as well. AO argued that the capacity purchased in order to provide services towards Schenker would be used for that customer alone, and thus that Schenker should cover all costs. In the end Schenker agreed to cover all costs, and in exchange got a discount on various services.



## **6.2 Part two**

### **6.2.1 What does AO need to consider when developing a pricing strategy for future contracts with CoD?**

In order to answer this question will present a list of recommendations and considerations. Many of the items on the list will be general and some will be specific to AO. Since many of the recommended actions are dependent on the company specific information we are unable to deliver a complete answer and when this is the case we will suggest actions.

Every transaction involves two actors, the provider and the customer. From our viewpoint AO is the provider and the customer is anyone of the possible customers, future or present, that want to purchase CoD IT-services. We will initially discuss the different aspects that the provider and customer have when a business transaction is being performed.

#### **6.2.1.1 The customer viewpoint**

The customers' main concern is to purchase a service or item at a cost that is equal to or lower than the value of that which is purchased for the customer. A transaction is usually initiated by a customer when an unsatisfied need occurs. This forces the customer to assess the situation, and decide on a way to fulfil the need, be it developing internally or purchasing externally. In some cases the provider is the initiating part, but in the IT-service business this is uncommon. When the customer wants to purchase a solution they seek out a solution that gives them the most perceived value for their money. When similar solutions are available the perceived value can be regarded as a mix of price and additional services offered. The customers today want to buy services at CoD, they want a solution, not a product, and they want a minimal risk. Another important factor is if the customer can get benefits from being loyal to one provider, such as discounts or additional offers.





### 6.2.1.2 The Providers Viewpoint

The providers' main concern is usually profit. In order to get a profit the provider must sell goods or services for than what it costs to manufacture or perform them. The problem for AO is that since they sell services priced by unit there is no fixed level of production to divide total costs on, but rather an expected amount depending on the customers stated demand. Another problem for AO is the diversity in their customers demand. As we discussed previously different companies have different needs for IT services, and this means that AO faces a unique demand structure for each customer.

### 6.2.2 Value-based Pricing

One answer to this question is to use value-based pricing as an addition to the cost-based pricing. The main difference between value-based and cost-based pricing is, as can be understood by the names, which aspect that is the basis for the price.

#### Cost based Pricing

Product → Cost → Price → Value → Customer

#### Value based Pricing

Customers → Value → Price → Cost → Product

**Figure 4. Cost based Pricing vs. Value based Pricing<sup>50</sup>**

This approach has a distinctive advantage for AO, and this is that the price is determined by the customers' perceived value rather than the costs of the provider, and since the cost for each performed unit of service is so difficult to calculate exactly this greatly reduces the necessary work in finding a correct price. The problem of ensuring profit still remains, but this is a lighter burden. We will discuss the value based approach step by step from the AO perspective.

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<sup>50</sup> Nagel & Holden, 1995



### 6.2.2.1 Customers

Since AO's customer base is so diverse in their needs and demands our suggested approach is to categorise them into different segments, and to develop a strategy for each segment.

In reality the pricing strategy will be a mix of many parts of the matrix in 4.10, and different parts may be applicable for different segments of customers. Our suggested segmentation is based both on customer size and on demand levels. Different sizes of customers have different characteristics; a major company has more to gain by contacting many sellers, where a small or medium sized company might pick one provider based on word of mouth or market position. Another aspect related to size is the company's economic abilities, a larger company logically has a greater cash flow, and thus a better ability to pay, which reduces the risk since AO is less probable to lose income from a client facing bankruptcy or similar.

The other aspect upon which we suggest segmentation should be based is the demand levels, and by demand we mean the amount of different services, not the actual amount of for instance storage or support the client demands. This aspect is included since a large company might only want to purchase some minor additional services to complement their own IT department. Such a company should be treated differently from a similar size company who purchase all of their IT needs from AO.

Level of demand	Size of company		
	Small	Medium	Large
Low ( few services)	A	B	C
Intremediate	D	E	F
High (many services)	G	H	I

**Figure 6. Customer Segmentation**

In the above matrix the profitability of a customer is higher the further to the low right it is placed. Naturally a large customer with a high demand is most profitable, and thus should get the most benefits. The customer base for AO consists mainly of small and medium sized companies, with few larger clients, and this affects the view of the different segments.



Companies in the upper left corner, A, is not very profitable, but does on the other side not pose a challenge for AO to satisfy. These customers can be ideal to cover excess capacity, but they do not validate any new investments or other expenditures.

As we move to the right the profitability increases, and also the opportunity for further profits if a company moves down in the grid. This is something to take into consideration for the customers in the C category, and we find that it is worth the extra effort if a C company can be moved into the F or even the I category by offering additional services since these companies have a great potential.

On the next row we have increased profits, but the D category companies are still not worth any extra effort, and are only slightly better than the A companies since their demanded amount is low even in a best case scenario depending on their small size. In the E category the profits and possibilities are noticeably better, and larger companies in this section can almost be treated as F companies. Since there are more of the medium size companies than the large this is where a major part of AO's profits should come from. Over time companies may travel from E to F if they grow or to H if extra services can be added. The F companies are few, but generate great profits, and as with the C companies extra effort should be made to move them towards I.

In the final row there is a low opportunity to move companies by efforts on AO's side, it is only if the companies change size that changes will happen. The companies in the G sector are still small, but can be numerous, and thus generate a large total profit. The H companies are even more profitable, and if they are stable this can generate a steady level of demand over long time. Companies placed in the box named I is contracts similar to the Schenker contract and in these cases the same approach can be used, and a unique price list for each company is a viable option.



## Costs

The problem that AO faces now is how to set the price for other customers, when the induced initial costs not have been covered. The initial and fixed costs for AO to reach and maintain the level of capacity needed to handle the customers demand are large but the costs of delivering services are small in comparison. This results in a low variable cost, which means that the marginal costs per each additional customer are small. Thus the problem can be described as how to cover a large fixed cost when the customers only pay per used unit, when the marginal cost per unit is small.

Another major aspect of the new contract is that Schenker already are contracted for a basic fee, covering the fixed costs for AO to handle the basic level of service that Schenker requires. This means that AO can offer Schenker an actual CoD for all extra services, since all fixed costs already are covered.

But the main point is that Schenker already pays the fixed costs. This is an important factor since the fixed cost ratio is high in this business<sup>51</sup>. When negotiating a contract with a new customer the client doesn't want to pay a large sum to enter the contract, they want a fixed fee to pay from day one. This means that the fixed costs must be covered by the overhead from the determined price per unit.

## Customers

There are clearly advantages to CoD, and AO is in the first stage of introducing it. The problem AO now faces is to develop a pricing strategy compatible to their product, something no competitor has ever done before them. So far the only customer that has a contract with CoD on its way to be implemented is Schenker. This contract is unique if compared to other customers due to the previous relationship and the size of the customer. The long relationship with Schenker has lead to an unusual situation where the hardware capacity already exists and need no more investments from AO: s behalf.<sup>52</sup>

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<sup>51</sup> Interview, Zoran Covic

<sup>52</sup> Interview, Zoran Covic



## 7 Conclusions

It is desirable for a provider to offer customers what they want. It is even more desirable to be the only one on the market that can do this and AO now faces a situation where they can develop and exploit a competitive advantage through their pricing policy. Desirable features in a pricing policy are abilities that allow both customers and suppliers to achieve their goals. In the case of the provider the main goal is profit and in the case of the customer it is to get a satisfactory value for money and a need satisfied.

The model that has been used before CoD was implemented did not yield enough profit and the customers were not happy with the way they paid for their services. With the introduction of CoD AO now enjoys a competitive advantage that allows them to be better than their competitors at satisfying the customers' needs. To conclude we can say that it is desirable to achieve a symbiosis providing both customers and providers with what they want. This would satisfy the customers need for the products and at the same time give the provider tools to maximize profit from those contracts and more easily control demand.

The conclusions that we make from this analysis is that AO need to revise their pricing policy in order to reassure them that they will get the most out of their customer relations.

### **7.1 Value Based Pricing**

One approach that can benefit AO is to use value based pricing rather than cost based pricing. There are many benefits from using this approach, but as mentioned before the main one is that this approach increases profits, since the price charged is based on how much the customer is willing to pay, rather than the costs. One problem with this approach is on the other hand the increased need for market evaluations in order to ascertain that the perceived value for the customer that AO bases their price on is the one the customer experiences. But the extra work that this entails provides AO with another benefit, which is that they get a greater understanding for their customers, regarding willingness to pay and what problems



that are perceived as most important factors and how that customer value their services. The cost based procedure will still need to be there to set the lower limit to the prices. This will allow for AO to maximize profits.

## **7.2 Customer Segmentation**

Another way to facilitate the creation of price lists is to create distinct customer segments, so that each customer in a segment can be approached in a similar way, with a normalized price list for that category. Another benefit of segmenting customers is that it can be decided beforehand how much additional work a customer is worth, based on possible future profits. This reduces the excess time spent with customers that won't yield an increased profit, and enables AO to put the efforts where they give the most profits.

## **7.3 Demand management; Bundling and Risk**

Our final aspect for AO to consider is the way they manage demand. Managing demand means that by pricing or other regulations a company increases or decreases demand in certain areas or under peak periods. In AO: s case the most interesting benefit that can result from this is that excess capacity can be sold at a lower price in order to minimize costs. Since the marginal revenue per sold unit is great this is a good way to distribute costs in a short time period. How this shall be implemented is impossible for us to say at this point, given the information we have, but with a greater knowledge of customers and costs this can be evaluated to give a satisfactory course of actions. The segmentation will benefit the bundling since different segments require different amounts of bundling. Some customers may be rewarded for buying more capacity and increase their use, benefiting both AO and the customer. It is primarily the segment with large customers buying small amounts of capacity that can become very profitable if they start increasing their usage in a long term commitment.



## 8 Literature

- R. Wilson. *Nonlinear Pricing*. 1993. Oxford University Press. New York
- J.E.G. Bateson. *Managing Service Marketing 3: rd ed.* 1996. The Dryden Press. Orlando, FL.
- C. H. Lovelock. *Services marketing 3: rd ed.* 1996. Prentice Hall Inc. Upper Saddle River. NJ.
- T. Lindblom. *Prissättning av betaltjänster*. 1990. Liber. Malmö.
- D. A. Aaker. *Strategic Market Management 5:th ed.* 1998. John Wiley and sons Ltd. E. Sussex
- R. Oxenfeldt. *Pricing Strategies*. 1990. Amacom. New York. NY.
- G. Schäder. *Prissättning*. 1995. Konsultförlaget. Uppsala.
- Drury, *Management and cost accounting 6: th ed.* 2004. Thomson learning. Canale. Italy
- Case et al, *Principles of economics 4: th ed.* 1996. Prentice Hall Inc. Upper Saddle River. NJ.
- Kotler et al, *Principles of marketing*. 2002/2004. Pearson Education Ltd. Essex, England
- M. Alvesson, K. Sköldberg, *Tolkning och reflektion*. 1994, Studentlitteratur. Lund
- M. Holme, B. K. Solvang, *Forskningsmetodik*. 1997. Studentlitteratur. Lund
- Booth et al, *The craft of research*. 1995. University of Chicago press, Chicago
- Atos Origin, *Atos Origin Nordic presentation. 2004-06-28*. 2004. Atos Origin



- Nagle & Holden, *The Strategy and Tactics of Pricing: a Guide to Profitable Decisionmaking*. 1995 Prentice Hall. Upper Saddle River. NJ.

### Articles

- T. Hoffman, *HP Takes New Pricing Path for Utility-based Computing*, Computerworld, 5/26/2003, nr. 21
- J.F. Kovar, *HP to offer Pay-as-You-Go Storage*, Computer Reseller News, 3/6/2000, Issue 884
- G. J. Tellis. *Beyond the Many Faces of Price: An Intergartion of Pricing Strategies*. 1986. Article nr. 33. Journal of Marketing. s 146-160.

### Interveiwis

- Zoran Covic

## 9 Figures and Tables

Figure 1. The history of Atos Origin in Sweden .....	8
Figure 2. Customer interaction.....	11
Figure 3. Cost based pricing vs. Value based pricing.....	27
Figure 4. Cost based pricing vs. Value based pricing.....	41
Figure 5. Taxonomy of pricing.....	42
Figure 6. Customer segmentation.....	43