



Open your mind. LUT.
Lappeenranta **University of Technology**

School of Business

International Marketing Management

Bachelor's Thesis

CLOUD SERVICE PURCHASE BEHAVIOR

25.11.2012

1. INTRODUCTION

The writer of this study has spent a decade in IT industry. Since the Dotcom crash many previously successful IT companies suffered problems in their sales and the writer dedicated on helping those companies to restructure their sales organization and to rewrite their key messages in the marketing. From an empirical perspective, very few changes seemed to make imposing results.

In many cases the focal point had to be transferred from product and feature oriented approach to solving customers' problems. Obviously the amount of activities had to be multiplied as well. However, due to the writer's empirical observation, not all and by far actually very few technology companies know the organizational buying behavior of their target group. On the contrary, often it seems that the sales manager is dedicating a lot of effort on a wrong organizational level and ignoring the other decision makers. Probably the decision making process in purchasing an information system differs now from the previous practice.

This study aims to open up some typical models of organizational buying behavior. As the cloud computing and cloud services seem to be the today's hype, the study seeks to further facilitate the understanding of organizational buying behavior regarding cloud services by interviewing a decision maker of this field in the purchaser's side and also for comparison a cloud service provider's representative from the vendor's side.

1.1 Research problems

This study focuses on recognizing the typical organizational buying behaviors. As the cloud services are relatively new business line in organizational environment but more familiar in business to consumer areas, the study starts by comparing the differences between consumer and business markets. The theoretical research problems are

- What is organizational buying behavior?
 - What is the difference between organizational and customer buying behavior?
 - What are the different roles in organizational buying behavior process?
 - Is there a suitable model for cloud services to describe the organizational purchase process?

Empirical research problems:

- Does cloud service purchasing follow the organizational buying behavior theory?
 - Are there differences between the approach of the supplier and the buyer, hence the supplier is more used to operate in the consumer market?
 - Is the buying center used in practice?

The objective of this study is to build understanding of basic organizational buying behavior models and thereby also to distinguish the different roles in the customers' organization. In order to be successful in selling to organizations, one has to be able to fulfill different kind of needs and therefore be able to develop various approaches over the same product or service.

1.2 Limitations

This study deals solely with organizational buying behavior and focuses on industrial buying and business-to-business markets. Governmental and non-profit organizations' buying behaviors are left out.

Geographically the work concentrates in the Finnish market. On this study, one Finnish decision maker has been interviewed and some references to Finnish studies over the information technology industry have been used.

Furthermore, in this study only a new buy situation is considered, that is, when a new service provider is to be chosen. The focus of this study is on the supplier selection.

1.3 Definitions

This chapter outlines some of the most relevant definitions.

Cloud computing

One common definition used e.g. by Gartner when referring to cloud computing is a style of computing where scalable and elastic information technology related capabilities are provided as a service to customer using internet technologies.

According to Gartner, cloud computing is not one market, but a combination of markets each evolving at a different pace. Cloud computing market consists of business process services, SaaS, PaaS and IaaS markets.

A cloud according to Cisco Systems is a powerful combination of cloud computing, networking, storage, management solutions, and business applications that facilitate a new generation of IT and consumer services. These services are available on demand and are delivered economically without compromising security or functionality.

IAAS

Generally used abbreviation for infrastructure as a service, which means providing the layer of data center space, network, disc space, server capacity, virtualization and operating system

PAAS

Generally used abbreviation for platform as a service, which means providing all the elements of IAAS but also including database, security, integrations and middleware as a service.

SAAS

Generally used abbreviation for software as a service, which means providing all the elements of IAAS and PAAS but the service also includes the software itself.

2. THE BUSINESS MARKET VERSUS THE CONSUMER MARKET

The business market consists of all the organizations that acquire goods and services used in the production of other products or services that are sold, rented, or supplied to others. (Kotler 1994, 210)

Business markets have several characteristics that contrast sharply with those of consumer markets:

“ Fewer, larger buyers. The business marketer deals normally with far fewer, much larger buyers than the consumer marketer does.

- “ Close supplier-customer relationship. Because of the smaller customer base and the importance and the power of the larger customers, suppliers are frequently expected to customize their offerings to individual business customer needs.
- “ Professional purchasing. Business goods are often purchased by trained purchasing agents, who must follow their organizations’ purchasing policies, constraints, and requirements. Many of the buying instruments . for example, requests for quotations, proposals, and purchase contracts . are not typically found in consumer buying.
- “ Several buying influences. More people typically influence business buying decisions. Buying committees consisting of technical experts and even senior management are common in the purchase of major goods. Business marketers have to send well-trained sales representatives and sales teams to deal with the well-trained buyers.
- “ Multiple sales calls. Because more people are involved in the selling process, it takes multiple sales calls to win most business orders, and some sales cycles can take years. A study by McGraw-Hill found that it takes four to four and a half calls to close an average industrial sale. In the case of capital equipment sales for large projects, it may take multiple attempts to fund a project, and the sales cycle . between quoting a job and delivering the product . is often measured in years.
- “ Derived demand. The demand for business goods is ultimately derived from the demand for consumer goods. For this reason, the business marketer must closely monitor the buying patterns of ultimate consumers.
- “ Inelastic demand. The total demand for many business goods and services is inelastic . that is, not much affected by price changes.
- “ Fluctuating demand. The demand for business goods and services tends to be more volatile than the demand for consumer goods and services. A given percentage increase in consumer demand can lead to a much larger percentage increase in the demand for plant and equipment necessary to

produce the additional output. Economists refer to this as the acceleration effect. Sometimes a rise of only 10 percent in consumer demand can cause as much as a 200 percent rise in business demand for products in the next period; a 10 percent fall in consumer demand may cause a complete collapse in business demand.

“ Direct purchasing. Business buyers often buy directly from manufacturers rather than through intermediaries, especially items that are technically complex or expensive (such as mainframes or aircraft). (Kotler 1994, 210-212)

However, many equivalents can also be found between consumer markets and organizational markets. The following Table exhibits the equivalents in the bases of market segmentation:

Type of factor	Consumer markets	Industrial / organizational markets
Characteristics of people/organizations	Age, sex, race Income Family size Life-cycle stage Location Lifestyle	Industry Location Size Technology Profitability Management
Purchase / use situation	Size of purchase Brand loyalty Purpose of use Purchasing behavior Importance of purchase Choice criteria	Application Importance of purchase Volume Frequency of purchase Purchasing procedure Choice criteria Distribution channel
Users' needs and preferences for product characteristics	Product similarity Price preference Brand preference Desired features Quality	Performance requirements Assistance from suppliers Brand preferences Desired features Quality Service requirements

(Johnson&Scholes 2006, 94)

3. ORGANIZATIONAL DECISION MAKING VERSUS CONSUMER DECISION MAKING

A firm or household does not purchase a product; individual decision makers do. Both actual value and signals of value are assessed and interpreted by these decision makers. The identity of the specific person or persons who make the purchase decision will influence, if not determine, the value attached to a product. The decision maker may not necessarily be the person who pays for the product (e.g., the doctor, not the patient, chooses drugs) and may be different from the user (e.g., the purchasing agent chooses a product used in the plant). The channel may also make its own decision about whether the firm is a desirable supplier. (Porter 1985, 140-141)

The organizational buying process is mostly a group process. Single individuals do not typically make organizational buying decisions; rather a varying number of people are involved in some way. It can therefore be stated that to understand organizational buying behavior one must understand group behavior (Morris, Berthon and Pitt 1999, 264).

Many factors distinguish organizational and industrial purchase decisions from individual consumer decisions. Some of these differences are as follows:

- “ Purchase decisions made by companies frequently involve many people, including those who do the actual buying, those who directly or indirectly influence this decision, and the employees who will actually use the product or service.
- “ Organizational and industrial products are often bought according to precise, technical specifications that require a lot of knowledge about the product category.

- “ Impulse buying is rare (industrial buyers do not suddenly get an %urge to splurge+ on lead pipe or silicon chips). Because buyers are professionals, their decisions are based on past experience and a careful weighing of alternatives.
- “ Decisions often are risky, especially in the sense that a buyer’s career may be riding on his demonstration of good judgment.
- “ The business-to-business marketing often involves more of an emphasis on personal selling than on advertising or other forms of promotion. Dealing with organizational buyers typically requires more face-to-face contact than is necessary in the case of end consumer. (Solomon 2004, 403-404)

Buyer purchase criteria can be divided into two types:

- “ Use criteria. Purchase criteria that stem from the way in which a supplier affects actual buyer value through lowering buyer cost or raising buyer performance. Use criteria might include such factors as product quality, product features, delivery time, and applications engineering support.
- “ Signaling criteria. Purchase criteria that stem from signals of value, or means used by the buyer to infer or judge what a supplier’s actual value is. Signaling criteria might include factors such as advertising, the attractiveness of facilities, and reputation.

(Porter 1985, 142)

Furthermore, the business buyer faces many decisions in making a purchase. The number of decisions depends on the buying situation: complexity of the problem being solved, newness of the buying requirement, the number of people involved, and time required. Patrick Robinson and others distinguish three types of buying situations: the straight rebuy, modified rebuy and new task.

- “ Straight rebuy. The purchasing department reorders on a routine basis and chooses from suppliers on an approved list. The suppliers make an effort to maintain product and service quality and often propose automatic reordering systems to save time. Out-suppliers attempt to offer something new or to exploit dissatisfaction with a current supplier. Out-suppliers try to get a small order and then enlarge their purchase share over time.
- “ Modified rebuy. The buyer wants to modify product specifications, prices, delivery requirements, or other terms. The modified rebuy usually involves additional participants on both sides. The in-suppliers become nervous and have to protect the account. The out-suppliers see an opportunity to propose a better offer to gain some business.
- “ New task. A purchaser buys a product or service for the first time (e.g. office building, new security system). The greater the cost or risk, the larger the number of participants and the greater their information gathering . and therefore the longer the time to a decision.

(Kotler 1994, 212)

Identifying the value a firm creates for the buyer and the signals of value used by the buyer rests on determining the identity of the real buyer. The process of identifying the real buyer often suggests new dimensions of performance that are not immediately apparent if the buyer is viewed as the firm or household. These can include such factors as prestige, personal relationships with supplier personnel that are valued in their own right, and the desire to avoid personal risk in the purchase decision by choosing a well-known supplier. IBM has exploited its position as a safe choice as a supplier, for example. (Porter 1985, 141)

Henthorne, LaTour and Williams (1993, 42) divide risk in organizational buying into three components: performance risk, social risk and economic risk. Performance risk refers to the risk that there is a failure in the product or it does not perform as it was supposed to. This risk is especially high when buying technically sophisticated products which buyers are incapable of professionally evaluating. Social risk relates to others

attitudes towards and acceptance of the product to be purchased. Economic risk is the risk of money loss if a bad decision is made.

4. PARTICIPANTS IN THE BUSINESS BUYING PROCESS

Who buys the trillion dollars' worth of goods and services needed by business organizations? Purchasing agents are influential in straight-rebuy and modified-rebuy situations, whereas other department personnel usually have a major influence in selecting product components, and purchasing agents dominate in selecting suppliers.

(Kotler 1994, 214-215)

The following table illustrates the previously mentioned types of industrial buying decisions and the participants' involvement in the task:

Buying situation	Extent of effort	Risk	Buyers involved
Straight rebuy	Habitual decision making	Low	Automatic reorder
Modified rebuy	Limited problem solving	Low to moderate	One or a few
New task	Extensive problem solving	High	Many

(Solomon 2004, 406)

Webster and Wind call the decision-making unit of a buying organization the buying center. It is composed of all those individuals and groups who participate in the purchasing decision-making process, who share the some common goals and the risks arising from the decision. The buying center includes all members of the organization who play any of seven roles in the purchase decision process.

1. Initiators. Those who request that something should be purchased. They may be users or others in the organization.
2. Users. Those who will use the product or the service. In many cases, the users initiate the buying proposal and help define the product requirements.
3. Influencers. People who influence the buying decision. They often help define specifications and also provide information for evaluating alternatives. Technical personnel are particularly important influencers.
4. Deciders. People who decide on product requirements or on suppliers.
5. Approvers. People who authorize the proposed actions of deciders or buyers.
6. Buyers. People who have formal authority to select the supplier and arrange the purchase terms. Buyers may help shape product specifications, but they play their major role in selecting vendors and negotiating. In more complex purchases, the buyers might include high-level managers.
7. Gatekeepers. People who have the power to prevent sellers or information from reaching members of the buying center. For example, purchasing agents, receptionists, and telephone operators may prevent salespersons from contacting users or deciders.

Several individuals can occupy a given role and the individual may occupy multiple roles. A purchasing manager, for example, often occupies the roles of buyer, influencer, and gatekeeper simultaneously. The typical buying center has a minimum of five or six members and often has dozens. The buying center may include people outside the target customer organization, such as government officials, consultants, technical advisors, and other members of the marketing channel. (Kotler 1994, 214-215)

5. MODELS OF ORGANIZATIONAL BUYING BEHAVIOR

To gain a simplified view to organizational buying behavior for a practical use, there are several models to handle the complex environment. The following introduces four major groups first conceptualized by Rowland T. Moriarty.

5.1 Task-Oriented models

Task oriented models focus on situation specific variables associated with a particular purchase. These models are primarily drawn from economics or the behavioral sciences. They try to examine different angles of the problem instead of trying to give a comprehensive explanation of buying behavior. These simple models provide conceptual foundations to many of the more complex models. (Moriarty 1983, 16)

5.2 Non-task-oriented models

Non-task-oriented models focus primarily on non-economic determinants and behavior and are more complicated than task-oriented models. This group of models is dominated by concepts from behavioral sciences and organizational psychology. Like any emerging field, organizational buying behavior is surrounded with disputes about the boundaries of the discipline. For example, there has been some controversy among researchers over whether to include in this group such psychoanalytic models as self-aggrandizement and ego enhancement. These basic concepts of psychology focus on the individual as the unit of analysis. These are two of a wide variety of concepts from several disciplines that have influenced the development of organizational buying behavior as a field. There are two important non-task models: the perceived risk model and the diffusion-of-innovations model. (Moriarty 1983, 21)

5.3 Decision-Process models

The empirical studying of the organizational buying process started in the 1950's. One of the major attempts to understand industrial decision making was an examination of the widely held assumption that purchasing is a totally rational process in the large organizations. (Moriarty 1983, 24)

5.4 Complex models

The early conceptual research in organizational buying behavior produced the task oriented models, the non-task oriented models, and the decision-process models. The research was spread out across a wide variety of academic disciplines. The simpler models explain various aspects of buying behavior by using theories from economics, political science, organizational psychology, and social psychology. Later on the conceptual researchers have attempted to combine these earlier models into complex models. The complex models capture more completely the multidimensional aspects of organizational buying behavior. (Moriarty 1983, 28)

At this study we have chosen to present one model called the buygrid framework. The model describes the buying stages in a new-task buying situation. On modified rebuy or straight rebuy situations some stages are compressed or bypassed. For example, the buyer normally has a favorite supplier or a ranked list of suppliers and can skip the search and proposal solicitation stages. Here are some important considerations in each of the eight stages.

1. Problem recognition. The buying process begins when someone in the company recognizes a problem or need that can be met by acquiring a good or a service. The recognition can be triggered by internal or external stimuli. Business marketers can also stimulate problem recognition by direct mail, telemarketing and calling on prospects.

2. General need description and product specification. Next, the buyer determines the needed item's general characteristics and required quantity. For standard items this is simple. For complex items the buyer will work with others . engineers, users . to define characteristics such as reliability, durability or price. Business marketers can help by describing how their products meet or even exceed the buyer's needs. The buyer organization now develops the item's technical specifications.
3. Supplier search. The buyer next tries to identify the most appropriate suppliers through trade directories, contacts with other companies, trade advertisements, trade shows and the internet. The move to internet purchasing has far-reaching implications for suppliers and will change the shape of purchasing for years to come.
4. Proposal solicitation. The buyer next invites qualified suppliers to submit proposals. If the item is complex or expensive the buyer will require a detailed written proposal from each qualified supplier. After evaluating the proposals the buyer will invite a few suppliers to make formal presentations. Business marketers must be skilled in researching, writing and presenting proposals. Written proposals should be marketing documents that describe value and benefits in customer terms. Oral presentations must inspire confidence and position the company's capabilities and resources so that they stand out from the competition. Proposals and selling are often organized in teams, which may focus on a particular geographic region, industry or market concentration. Sales people can leverage the knowledge and expertise of co-workers instead of working in isolation.
5. Supplier selection. Before selecting a supplier the buying center will specify desired supplier attributes and indicate their relative importance. To rate and identify the most attractive suppliers buying centers often use a supplier-evaluation model.

ATTRIBUTES	Importance weights	RATING SCALE			
		Poor (1)	Fair (2)	Good (3)	Excellent (4)
Price	.3				X
Supplier reputation	.2			X	
Product reliability	.3				X
Service reliability	.1		X		
Supplier flexibility	.1			X	
TOTAL SCORE: $.3(4) + .2(3) + .3(4) + .1(2) + .1(3) = 3.5$					

To develop compelling value propositions business marketers need to better understand how business buyers arrive at their valuations.

6. Order-routine specification. After selecting suppliers, the buyer negotiates the final order, listing the technical specifications, the quantity needed, the expected time of delivery, return policies warranties, and so on. Many industrial buyers lease heavy equipment such as machinery and trucks. The lessee gains a number of advantages: conserving capital, getting the latest products, receiving better service and gaining some tax advantages. The lessor often ends up with a larger net income and the chance to sell to customers who could not afford outright purchase.

In case of maintenance, repair and operating items, buyers are moving towards blanket contracts rather than periodic purchase orders. A blanket contract establishes a long term relationship in which the supplier promises to resupply the buyer as needed, at agreed-upon prices, over a specified period of time.

7. Performance review. The buyer periodically reviews the performance of the chosen supplier(s) using one of three methods. The buyer may contact the end users and ask for their evaluations; the buyer may rate the supplier on several criteria using a weighted-score method; or the buyer might aggregate the cost of poor performance to come up with adjusted costs of

purchase, including price. The performance review may lead the buyer to continue, modify or end a supplier relationship.

Buygrid framework: major stages (buyphases) of the industrial buying process in relation to major buying situations (buyclasses).

		Buyclasses		
		New task	Modified rebuy	Straight rebuy
	1 Problem recognition	Yes	Maybe	No
	2 General need description	Yes	Maybe	No
	3 Product specification	Yes	Yes	Yes
Buyphases	4 Supplier search	Yes	Maybe	No
	5 Proposal solicitation	Yes	Maybe	No
	6 Supplier selection	Yes	Maybe	No
	7 Order-routine specification	Yes	Maybe	No
	8 Performance review	Yes	Yes	Yes

(Kotler & al. 2009, 279-287)

6. CLOUD SERVICE BUYING BEHAVIOR

The evolution of cloud computing over the past few years is potentially one of the major advances in the history of computing. However, if cloud computing is to achieve its potential, there needs to be a clear understanding of the various issues involved, both from the perspectives of the providers and the consumers of the technology. While a lot of research is currently taking place in the technology itself, there is an equally urgent need for understanding the business-related issues surrounding cloud computing. (Marston & al. 2010)

Interesting issues from the writer's perspective are the differences between buyer and seller concerning the purchase process. In the beginning of this study the differences between consumer buying behavior and organizational buying behavior have been

shown. Cloud computing as a phenomenon has first been widely spread to consumers and the decision makers more than likely are familiar with some solutions as consumers.

While cloud services such as webmail, Flickr and YouTube have been widely used by individuals for some time, it is not until relatively recently that organizations have begun to use cloud services as a tool for meeting their IT needs. (Lin, A., & Chen, N.-C. 2012)

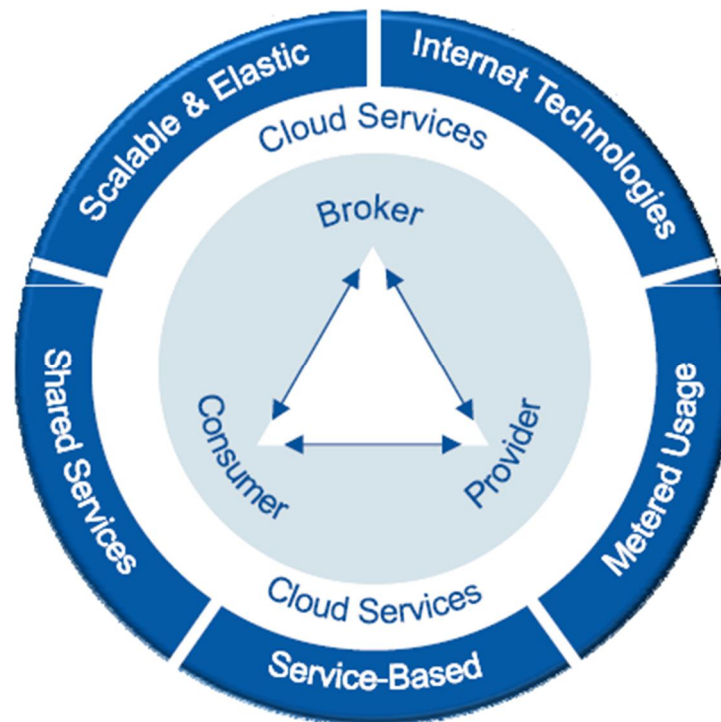
However, it is interesting to find out the key factors in organizational cloud service purchase process. The reason for comparison between buyer and seller in this field is simply the fact that the providers are at the moment more used to consumer business than to sell to organizations.

In the following the characteristics of current situation in cloud services business is described and a deeper understanding of cloud services buying behavior is built through an interview.

6.1 Description of the Finnish information technology services business

According to the Federation of Finnish Technology Industries, the size of the whole Finnish information technology market is approximately EUR 5.6 billion. Even though a lot has been spoken about the cloud solutions, the latest Market Visio survey estimates that the size of the whole Finnish cloud market does not yet exceed EUR 100 million. As there are still many ways to describe the whole business area and the roles of the different players are not yet constant, there is still a lot of room to gain market share and by just keeping up with the growth any player would grow more rapidly compared to the old school information technology services growth.

Market Visio estimates 2% annual growth to the traditional information technology services but 20% annual growth to cloud services.



Gartner illustration of cloud services

6.2 Reasons to migrate into cloud based services

Before choosing the components to find out the cloud service buying behavior we want to take a look at the typical reason to switch from the traditional local installations and projects into cloud based technologies.

The potential benefits of adopting cloud computing can be assessed from both the financial savings and resource management perspectives. One obvious financial benefit of cloud computing, especially for small to medium size companies, is the savings made from buying, running, and maintaining their own hardware and software infrastructures. (Miller 2008).

Universal access to software (SaaS) and services can also bring financial benefits by not needing to pay for software licensing fees. (Lin, A., & Chen, N.-C. 2012)

Following the studies realized by Gartner globally and Market Visio locally, there seems to be five major factors to endorse the cloud solutions:

- “ Costs. There is no need for large up-front investments and the customers only pay by the usage. Also you can do budgeting with great ease.
- “ Fast implementation. There is no need for long projects and e.g. in the test phase the server capacity can be scaled by the usage without almost any need of forecasting the time and material needed.
- “ Data amount and data security. The amount of data in the storage grows rapidly and on the other hand the customers need to shift the responsibility of warehousing the ever growing amount to a service provider.
- “ Easy to use & low maintenance. The customers appreciate nowadays a lean IT organization and therefore prefer not to do all the maintenance work needed themselves. Also it seems to be trend to let the own IT personnel to focus more on business development related issues.
- “ Mobility and globalization. There is an accelerating need to be able to use the data and the systems with any device from everywhere.

(Market Visio 2011)

Obviously there are also concerns in adapting the cloud services. One concern is the contemplation of failure downtime, which will vary by provider, and can happen as server maintenance is executed or as unforeseen outages occur. Another concern is the complexity and compatibility of cloud computing implementation can be a barrier to cloud computing adoption. While cloud computing has been regarded as an important technology that can provide strategic and operational advantages, significant rates of implementation in the high-tech industry are yet to be seen.

Firms can begin by implementing cloud computing services into business processes, such as ERP and CRM. These processes are of high value to the firms, and the benefits of adopting SaaS with their trading partners helps them to compete with their bigger rivals. (Low C. & Al. 2011)

6.3 Cloud services delivery models

The cloud services delivery models can be broadly categorized into four types:

Software-as-a-service (SaaS), Service, Platform-as-a-service (PaaS) and Infrastructure-as-a-service (IaaS). Each of the service types serve different purposes and target different customers however they share a common business model that is that they 'rent' the use of their computing resources including services, applications, infrastructures, and platform to customers. This model is similar to the application service provider model (ASP) in which a service provider provides software, infrastructure, people, and maintenance to run in a customized fashion for the customer. (Lin, A. & Chen, N.-C. 2012)

6.4 Supplier search in the buygrid framework and the role recognition

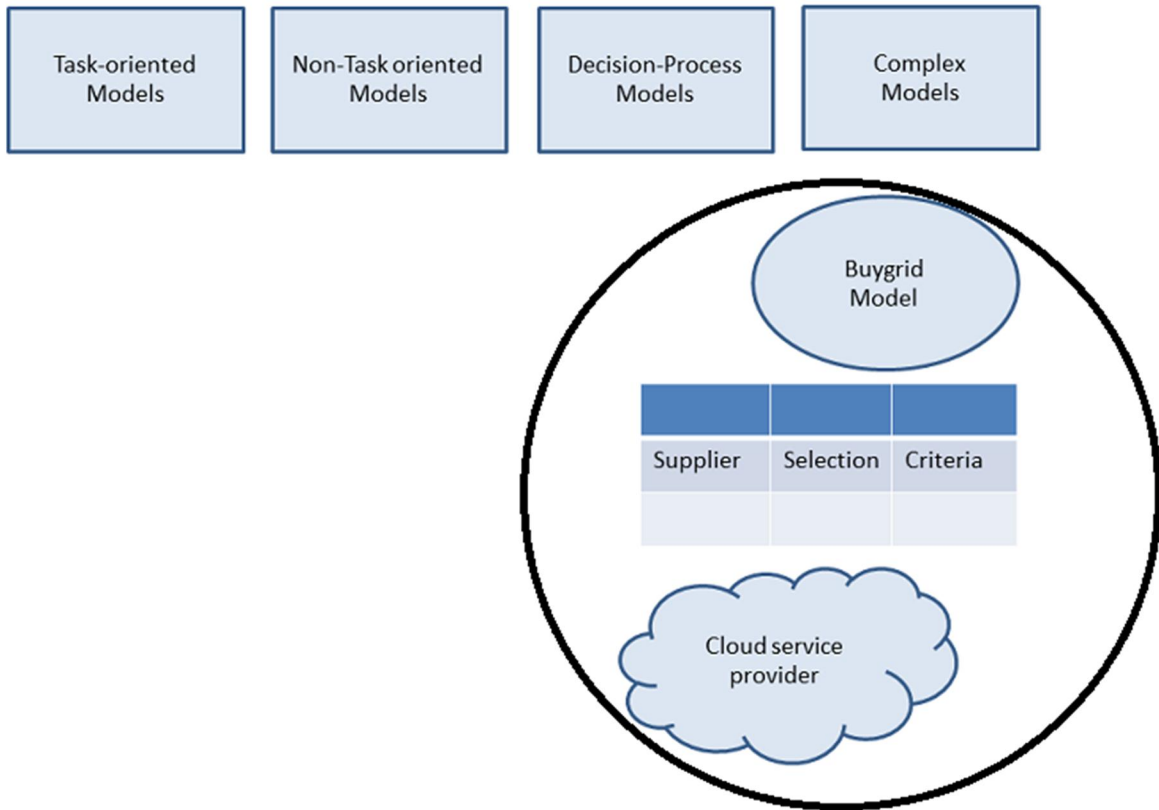
As mentioned earlier the aim of this study is to gain better understanding of purchasing behavior of cloud services and to enhance the understanding of different roles in the purchase process. In the following we recognize the different roles in different phases and deepen the understanding of the right attributes in the supplier selection.

This study presents a qualitative case study by two interviews, a buyer and a supplier. Therefore also the results of supplier and buyer can be compared.

6.5 Theoretical framework of the study

Purchasing criteria is adapted from the buygrid framework and the comparison between the estimated criteria of the supplier and the buyer has been done.

Models of organizational buying behavior



Theoretical framework of the study

7. RESEARCH METHODOLOGY

This study presents a qualitative case study. It includes two interviews. By using the interviews wanted to obtain deeper understanding of the business characteristics and buying behavior. On the other hand, a comparison between the supposed purchase criteria and real purchase criteria has been made.

The interviews were qualitative, half structured interviews with open questions. According to Hirsjärvi and Hurme interview is the most suitable method of collecting data when the questions require answers that interpret or define an issue or a situation.

There is not one exact way to evaluate the reliability of a qualitative research. More than statistical significance this study wanted to be a pre study for subsequent research.

8. EMPIRICAL RESULTS

In this chapter the findings of the empirical study are presented. The suppliers view is introduced first and after that the buyers view.

8.1 Cloud service provider's view of the buying behavior

The most important attributes in supplier selection from supplier's perspective are the following:

Price. The price image of the supplier still seems to make difference and the total cost of ownership in particular.

Reputation. In information technology field the general supplier reputation makes a difference.

Ease of doing business. The supplier likes to emphasize this not only on corporate level but also in personal level. The sales representative and the whole team can make a difference.

References. There is also a great difference, should the supplier have credible (and public) references from similar projects or services.

General fit and applicability. However, one should never forget the service itself. Even if the supplier passes all the previous levels, the service itself has to fit in the demand.

8.2 Cloud service providers view to the different roles

The following table shows the different roles and job titles in the purchase process:

Role	Job titles
Initiator	Division director, BU director, CEO
User	Manager, any end user
Influencer	IT manager, server/storage/network manager, Head/Super User
Decider	Procurement manager, Head/Super User
Approver	CFO, Division director, BU director
Buyer	Procurement/purchasing manager, CFO
Gatekeeper	server/storage/network technician, Random IT/end-user staffer

8.3 Cloud service purchaser's view of the buying behavior

The most important attributes in supplier selection from buyer's perspective are the following:

Reliability and security. The most important factor from the buyer's perspective is the availability of the cloud applications and also the response time in fault situations.

Flexibility. This includes the actions of the service provider in general but also the changeability of the solution itself, including e.g. the license conditions. The other important word used here was understandable, i.e. some service providers are not able

or willing to simplify their conditions enough for the business owners to be able to be sure that the contract is not going to risk their business operations.

Knowledge of business and industry. This was not so important issue as the two previously mentioned factors but anyhow quite important. The supplier should be familiar with the line of business the customer is operating. Should the supplier be unfamiliar about the business logics e.g. earnings, the correct application development is difficult or even impossible.

Problem solving skills and willingness towards innovations. This quality is also named to be quite important. Should the service not exactly meet the business requirements, the capability to find out suitable solutions without expensive modifications is needed. This attribute is related closely to the knowledge of business.

8.4 Cloud service buyer´s view to the different roles

The following table shows the different roles and job titles in the purchase process:

Role	Job titles
Initiator	Foremen, Team Leader, Manager, Director, Vice President, President, CFO, CDO, CEO
User	Foremen, Team Leader, Manager, Director, Vice President, President, CFO, CDO, CEO
Influencer	Application specialist, Account Manager, Finance Manager,
Decider	CFO, CDO, Project Director/Manager, ICT Director
Approver	CEO, CFO, CDO, COO, Head of ICT
Buyer	CDO, Head of ICT, Project Director/Manager
Gatekeeper	CFO, CDO, COO, Head of ICT

9. CONCLUSIONS

The aim of this study was to understand organizational buying behavior and how it differs from the consumer buying behavior. Furthermore, there was a case study to enhance the understanding of the cloud solution buying behavior from two perspectives. Firstly, how a supplier estimates the customer buying behavior and different participant roles and secondly, how a cloud solution customer sees those factors. Naturally it is interesting to find out, if those differ one from another.

9.1 Major findings

Firstly, it looks like in the decision making process very high ranked officials are participating in almost every step. This seems to be unfamiliar fact to the supplier, hence in the level of materials and in multi-level selling this should be taken into consideration. This finding strengthens the experience the writer also had and more than likely the transition in decision making has happened quite lately. In tough times there are no low hanging fruits for the sales people. On the other hand, this case study only dealt with one supplier and one customer but it could be interesting to know if this phenomenon is more common.

There was another interesting finding in the interview of the buyer; it seems that at least in their corporation there is no buying center in practice, when dealing with cloud service purchase decisions. On the contrary, every business unit and even team is doing independent evaluations and decisions. This seems irrational taking into consideration that concurrently the importance of the supplier's reliability and security are very important attributes. Likely using the purchase power and negotiation skills in the corporate level, much tougher conditions and service level agreements should be available.

There are also some major differences between the estimated attributes of the supplier and the real attributes of the buyer. Obviously the buyer does not find the price . at least in the supplier selection . as important as the vendor imagines. It is actually not even mentioned in his list. However, probably the price negotiation is tough then after the supplier or the short list of possible suppliers has been chosen.

Both sides give a great value to references and to the general ease of doing business; anyhow there is also an interesting difference between the whole mind-set. From the supplier's point of view, there is no emphasis on the future whereas the buyer pays also a lot of attention to the willingness and capability of the supplier to solve future problems and to further develop its solutions, should the business requirements change. This point is very important to be taken into consideration, when planning the subsequent sales approaches. One can imagine that an experienced buyer already understands, that a suitable solution now can be an obstacle in the future, as in ever changing business environment one can rarely foresee all the future needs. On the other hand, from selling perspective we can easily . and falsely - believe that our solutions are forever.

9.2 Suggestions for future research

Organizational buying behavior has got a lot of interest in the past and many models have been developed. It is fairly easy to distinguish the features of personal and industrial buying behavior. However, this study shows that there might still be something to do by focusing on different attributes in supplier selection phase - and also to whom to market the attributes. At least from the writer's perspective this generated more questions. Should we ask from more suppliers and more buyers, would the answers still vary like in this study? Is it a common practice that the cloud solutions can be chosen without a buying center decision? Are all the corporations including such high rated officials in all the decision making phases? And the most interesting question, could a cloud service provider sell more by focusing one of the key messages on the future development, not only on the past references?

References

- Henthorne T., LaTour M. and Williams A. 1993. How organizational buyers reduce risk. *Industrial Marketing Management*, Vol. 22.
- Johnson G., Scholes K. and Whittington R. 2006. *Exploring corporate strategy*. Prentice Hall.
- Kotler P. 1994. *Marketing Management*. Prentice Hall.
- Kotler P, Keller K.L., Brady M., Goodman M., Hansen T. 2009. *Marketing Management*. Prentice Hall.
- Lin A., Nan-Chou C. 2012. Cloud computing as an innovation: Perception, attitude, and adoption. *International journal of information management*.
- Low C., Chen Y., Mingchang W. 2011. Understanding the determinants of cloud computing adoption. *Industrial Management & Data Systems*.
- Marston S., Li Z., Bandyopadhyay S., Zhang J., Ghalsasi A. 2010. Cloud computing . The business perspective. *Decision Support Systems*.
- Miller M. 2008. *Cloud computing: Web-based applications that change the way you work and collaborate online*. Que Publisher.
- Moriarty T.R. 1983. *Industrial buying behavior*. Lexington books.
- Morris M. H., Berthon P, Pitt L. 1999. Assessing the structure of industrial buying centers with multivariate tools. *Industrial Marketing Management*, Vol. 28.
- Porter M.E. 1985. *Competitive advantage*. The free press.
- Solomon M.R. 2004. *Consumer behavior, buying, having and being*. Prentice Hall.
- www.cisco.com 12.10.2012
- www.gartner.com 12.10.2012
- www.marketvisio.fi 12.10.2012

www.teknologiateollisuus.fi 12.10.2012

Interviews

Nakari, Jussi. (Vice president, business development, Empower Oy)

15.10.2012 Kotka, Finland.

Turunen, Turkka. (Client solutions executive, data center and cloud solutions, Cisco Corporation)

13.10.2012 Helsinki, Finland.