ON-DEMAND APPLICATION INTEGRATION BUSINESS CONCEPTS AND STRATEGIES FOR THE ASP MARKET

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Abstract

The way online business is performed will be changed by application service providers (ASPs) and ASP marketplaces (MMM). A fundamental shift can be observed in Corporate Application Delivery: The enterprise applications market is transforming into a rental-based software model coupled with managed services [9]. ASP marketplaces provide alternatives to the classical business model of software which will have a significant impact on the software market [10]. Still, before this kind of ASP marketplaces will become commonplace, several critical research questions have to be answered. The main problem is economical, not technical: Application service providers and ASP marketplaces want to know how to set prices for different customer groups and how to offer digital goods in sizeable versions (product lines) which are fitting to the size of the company and the budget of the consumer. Our goal in this paper is to describe different business models for ASP marketplaces such as MMM. We explore ways to version software to product lines. Selling software versions for different prices allows ASP marketplaces to receive the maximum value of digital products from the market, and it leads to inexpensive, disaggregated and customized software packages.

1 Introduction

The ASP marketplace MMM offers its customers access to a personalized computing environment from any networked computer. Customers permanently have full access to all of their files, applications, and to their corporate network. By offering customized online environments, small and medium companies can get wide area networking, remote access, and file servers for a price that scales to the size of the organization [17]. The cost of using software online may be reduced dramatically, because the customer does not need to purchase dedicated hardware, or worry about in-house expertise for installation and maintenance.

The classical market structures will be extended by new relations between the market actors. ASP marketplaces will take on a central role in this new business area. This thesis is supportetd by plans of the software industry companies. Microsoft, Oracle and HP will offer the next generation of their software packages for online use on an ASP platform [9]. Online software applications and digital goods provided by an ASP marketplaces like MMM will become dominant in the future. But before this kind of software marketplaces will become commonplace, several critical questions remain open to research. The main problem is not the development of technical solutions or appropriate licensing and micropayment schemes and secure networks, given the fact that software marketplaces like MMM are independent of any particular payment or encryption scheme [17]. It is not a technical but rather an economical problem software providers and providers of digital products have to face. They need to renew and extend their product line and pricing scheme for online business [6]. How is it possible to offer customized software components and special combinations of software components to the consumer? In order to achieve comparative competitors advantages in the new online market structure it will not suffice to simply transfer the classical software licensing model to the online medium. New business concepts, which allow the customization and personalization of software components in a product line (Versioning) and offer a personalized desktop configuration will determine either the success or the doom of software marketplace [18]. In this paper we are going to investigate relevant aspects for the success of an online marketplace for digital products. We will start by describing the marketplace, its product and actors. Then we will illustrate new pricing and product strategies in the context of marketplaces for digital goods. We conclude with ideas for feature research, in particular concerning the readiness of customers to use or not to use an ASP or software market places.

2 Market Intermediaries and ASPs

MMM is a marketplace for application service provider (ASP) and offers an infrastructure for managing the deployment and use of distributed application services on the web. It manages and delivers application capabilities to multiple entities. Applications reside and execute on the software application provider's platforms, but are managed through the MMM infrastructure [12]. The aim of MMM is to provide a software marketplace solution for small and medium sized companies. It enables companies to use software components online or to outsource selected processes. Thereby companies can focus on their core business and reduce their costs for IT personal, software license and application maintenance. MMM propagates a paradigm that involves new pricing and product strategies like differentiated pricing for particular customers and versioning the product for individual customer requirements. The new pricing and product strategies are based on a complex business model which allows software producers or dealers to offer their software products in the classical licensing model or in more adapted models like leasing, renting, or pay per use [17]. MMM users can interact with the application services through a standard Internet browser, not requiring any additional software. Costs for hardware, implementation, system maintenance and IT personal will be eliminated by using MMM. The appendix contains a detailed cost-calculation-scheme. Today's e-business requires an integrated, tested platform like MMM that is ready to run a wide range of internet applications and desktop profiles. The MMM platform is also based on open industry standards so that you can extend the platform with specialized software from other vendors.

In the following, we provide an overview of the online software marketplace and its function. Then we present its actors and their roles. Eventually, we turn to a description of the digital product.

2.1 Function of the online software marketplace

Intermediaries like MMM play a central role in the new digital economy and in the exchange of digital products and information. They create economic value for customers, vendors, market intermediaries, and for society at large.

Matching requirements of buyer and seller	
Software offering – software features – software lines – aggregation of software **Price discovery** – software auctions	**Search functions** – software price and information – buyer preferences – community information **added value for customers** – community information
Facilitation of trade	
Personalization – customised environment – software lines – on demand softwareintegration **Payment systems** – SET	**Executing software Online** – no installation – no service – no hardware **Trust** – secure data transaction
Providing secure & institutional infrastructure	
Standardisation – XML EDI **Legal** – contract law – intellectual property protection	**Monitoring** – data mining – regulations **Front-end access** – PDA, mobile Phone

Table 1: Function of online software marketplace

Intermediaries have three main functions (Table 1): (a) matching the requirements of buyer and seller; (b) the facilitation of trade, exchange, and payment of digital products; (c) providing a secure institutional infrastructure that reinforces the efficient function of the market [2].

The main function of an intermediary is the process of matching buyers' demand with vendors' product offerings. For this process the software seller must determine and present the product offer to buyers in a transparent way. Intermediaries can provide vendors information about demand for special software versions or aggregations of software components [3]. By doing so, intermediaries will stimulate the suppliers to develop new product versions with characteristics that match the needs of buyers. Buyers and vendors can reduce their search costs by using an intermediary [4]. It accelerates the matching process through price discovery determining the prices at which demand and supply clear and trade occurs. More detail about the impact of the pricing strategies for an intermediary will be given in Section 3.2. Specialized transactions are required to transfer the software or data to the buyer and the payment to the seller or bank. For these transactions, intermediaries need a certain level of trust, intending to protect the buyer as well as the seller and the intermediary from opportunistic behavior [19]. Institutional infrastructure specifies standards, laws and regulations that rule market transactions, such as issues related to contract law, dispute resolution, and intellectual property protection, and it especially provides mechanisms for their reinforcement.

2.2 Actors and their roles in the new market structure for digital products

Having given an overview of the functions of the marketplace, we now turn to the presentation of the actors and the roles they take on in this very marketplace.

Application Service Providers (ASPs) own the application or a special software license to offer the software product online. An example for an ASP is the company Thinter.net.

Data providers publish and offer data and access to databases. They may simply submit files to an online repository, or provide more sophisticated online data source that ships or pushes data on demand. Examples include online stock quote services, geographic information systems, and consumer pricing data services [17].

Application server providers host the computational services (application) and provide network access to them. Application server providers and application service providers will often coincide.

Infrastructure provider / intermediaries offer a framework that grants authorized users secure access to application server sites. They act as an intermediary between the buyer and the seller, which makes them responsible for the trade function of the online software marketplace (Section 2.1). Consequently they can be considered as the kernel of the new software market structure. The infrastructure provides functions to establish secure connections, to interoperate applications, and to manage services remotely. It also offers new pricing models such as pay per usage and software renting in addition to the classical business model of licensing. Moreover it offers new product strategies such as versioning and disaggregation of software suites.

The interplay between these various actors lead us to develop a framework for computational service infrastructures called MMM- (Middleware for Method Management) [17]. MMM provide a wide range of services on the basis of different business models (license, renting, advertising, pay per usage) for the software seller and buyer. This service approach presents a striking contrast with today's stand-alone software solutions, such as business software (e.g., SAP R/3) that usually require large investments in hardware, software for installation, maintenance, upgrading, and an armada of well trained personnel to deploy the system effectively. To achieve short time to market, little development is put into an overall infrastructure providing basic services and trade facilities. Reusable components would be essential for a broader success, mainly for two reasons. First, there are many issues of data security, accounting, and transaction management that components could solve once across the various applications. Second, transparent interoperation would be a key to add value to individual services. Interoperation, a work between services, offers customers convenient, personalized integrated software packages. Buyers can create their own software packages and choose the software version out of a software product line which will fit their budget. Such techniques would also facilitate the move from current aggregation software distribution to more demand- adapted ways of paying for selected data sets or for the personalized software packages [5]. This new kind of pricing schemes would lower entry barriers to the market for smaller suppliers (taking into account the low set-up cost). Users would find it easier to get exactly the data they want, or the software packages (software versions) that match their budget. As the budget increases, a new data service can be chosen without need of recoding the interface to the consumers' application. In the case of stock data, for example, users can decide whether to buy expensive "premium" stock data or stick to freely available sources. They may start application development with free data, determining their needs. Once development is finished and a revenue can be derived, they will move on to a new service or provider allowing them to get an appropriate cost/revenue relationship. To close the description of the marketplace, we will now turn to a short definition and characterization of digital products and their cost structure. In the following we will study in more detail the new product and pricing strategies.

2.3 Software, digital goods and information goods

Software (applications), digital goods (digital images) and information goods (digital news) are digital products that can be distributed and used in digital form over the internet. Examples are software applications, music (mp3), video (real video), text (news), images and so on. Everything that can be digitalized is either software or a digital good or an information good. All of these goods have a different value for customers [16].

Application service providers and intermediaries such as MMM want to know how to set prices for different customer groups and how to offer digital products in sizeable software versions that are adapted to the size of the company and the budget of the consumer. Digital goods, such as mp3 music files or images, allow perfect copies to be easily created and to be distributed almost free of charge via the internet. Many software products have been aggregated (MS Office Packages), primarily to save on transaction, distribution and menu costs. But these costs are much lower on the internet. Thus, software and other types of content (data) may be increasingly disaggregated and metered, as on-demand software components and methods [8]. Conversely, buyers' main interest is to aggregate their individual software packages built up out of many software components. Every business model for providers and marketplaces of information are based on the fact that buyers differ extremely in how they value particular digital products [13].

2.4 Cost structure of digital products

For a marketplace like MMM it is indispensable to know the characteristics and the cost structure of digital products. The cost structure of the software developer is rather extraordinary. Software as an example is often very costly to produce but extremely cheap to reproduce. The challenge for a software provider in pricing is to find a way to sell to an audience broad enough to cover the high production costs. Development and production of a digital good involves high fixed costs and low marginal costs. The costs of producing the first copy of an digital product may be substantial, but the marginal costs of producing additional copies is negligible [16]. Large fixed cost, small incremental costs and substantial economics of scale are the very economic nature of digital products. Thus, cost-based pricing doesn't make any sense. Information goods should rather be priced according to the value consumers attribute to them. Still, dealing with the value of digital products, it is important to keep in mind the requirements and the personal value association of each target consumer. Consumers have widely different values for a particular piece of information [11]. Value-based pricing evidently leads to differentiated pricing. Software producers determine a schedule of product offerings that they expect will maximize their profits. By using an intermediary like MMM, they will get more informations about the buyers' demand and therefore will be able to sharply reduce the distribution costs. In the same way, the transaction costs of administration, distribution and payment will decrease.

I will give an overview of relevant pricing strategies for a software marketplace like MMM in detail in Section 3.2 after having treated business models and product strategies in the context of an ASP marketplace.

3 Business models for an ASP marketplace

The choice of a business model represents one of the most important decisions for an application software provider and software marketplaces, as it involves the basic questions of how and how much profit should be generated. Thus, the pricing and the business model are two closely linked topics.

Prices are often set in a differentiated manner. Companies may differentiate their prices following factors such as the consumers' age or time and place of consumption. Nevertheless, the pricing strategy decision is not the first one to be taken: before a company can determine its pricing strategies, it has to decide in favor of a particular business model, to which the pricing strategy will then have to fit. Several business models can be distinguished in the domain of media and communication [1].

ASP profit options include licensing (per user), renting, advertising, and pay-per-usage. Yet, all of these are projected to cost customers less than traditional enterprise applications. In addition to that, the different business models are linked among each other and are mostly found as a mix.

First of all, we should make the distinction between immediate and intermediate business models. The difference concerns the presence or absence of a medium between the consumer and the supplying company. These categories can be subdivided, which eventually yields five basic types of business models.

As far as immediate business models are concerned, we discern three subcategories. Two of them can be viewed as independent of the actual consumption. These payments are either non-recurrent (such as fees for connections or licensing fees), or recurrent (such as regular monthly payments in subscription contracts, or base fees). Subscription fees can be considered as a recurrent fees; their characteristic is the constant amount to be paid, independent of the actual consumption.

In contrast to this sort of payment, fees may as well be calculated based on the amount of transactions supplied, or the amount of time spent consuming (as for example at telephoning).

As stated above, the second big category of business models groups intermediate ways of payment. Here, only two subcategories can be distinguished, based on the intermedia by which the payments are executed: on the one hand, these may be public agencies, on the other hand, companies act as intermediaries. Whereas the government intervenes by subsidies to institutions considered worth being financially sustained (e.g., granting university free access to the Internet), private companies have different, mainly three incentives to mediate: not only do they attract the consumers' attention by financing their needs via advertising, but they also called considerable information about their customers, which they can use for themselves or sell to other companies. This business model, which is based on data mining techniques [1], yields companies material and immaterial profit, as they sell information and, at the same time, use it to optimize their own operations. Furthermore, companies can play a mediating role in transactions, and thereby get a part of the profit generated by their help. Still, these models are ideals, and therefore are not often observed in the purity we have described. They are mostly found in combinations, i.e., companies tend to adopt several business models they intend to use for different consumer groups. This enables companies and their consumers to match their interests in a better way, maximizing profit and utility respectively, as both of them agree on making concessions. For this match to occur as quickly as possible, companies have to investigate the needs, habits and preferences of their potential customers, so that they can offer consumers the kinds of contracts they expect will best fit their budget and needs.

This leads us to the next topic, i.e. the product strategies on an ASP marketplace[22], which we are going to deal with in the next part.

3.1 Product strategies for the ASP marketplace

Especially in the domain of software, consumers tend to have very specific and absolute preferences, leading to a great variety of software component combinations demanded. This generates an undeniable need for product differentiation in order to satisfy the customers' needs. Product differentiation is realized on the one hand through customizing and personalizing of digital products, and on the other hand through versioning.

3.1.1 Customizing and personalizing digital products

Software marketplaces and ASPs offer their customers to personalize and customize the digital product. This generates the greatest value possible to the customers. The customer must be given the choice to add or to subtract values to the software package. The most important aspect to be kept in mind in the context of this model is that the pricing arrangements capture as much of the perceived value as possible. MMM customers can use a meta search engine to describe in detail the required software component and added values like services by the means of metadata. In order for such a meta search engine to be successful, it is indispensable that software providers describe each function of a software component in a standard metadata format - such as XML. For an intermediary it is on the other hand indispensable to know the customers' preferences. MMM offers a one-to-one communication with the customers, and thus informs the intermediary and ASPs about customers' needs and preferences. In addition to the registration, MMM uses observation functions to get demographic (zip code, age, gender) and reading behavior (queries, clickstream) information, which can be used for target advertising as a business model on MMM.

3.1.2 Versioning the digital products

A great challenge for an online software marketplace and an ASP is to offer personalized products with personalized prices. Versioning means offering a product line of variations on the same underlying good [15]. The product line is designed so as to appeal to different market segments, thereby selling at a high price to those who have a high value for the product, and a low price to those who value it less. By offering product lines to customers, vendors learn about their behavior and requirements. Offering different software versions to high value customers and low value customers permits vendors to see how the market is divided.

Shapiro and Varian [16] identify several different types of versioning (Table 2):

Delay of information	**High Value: real time stock quotes** **Low Value: 20 minute delayed stock quotes**
User interface / search function	**High Value: elaborate user interface** **Low Value: simple interface.**
Convenience	**High Value: simple to use** **Low Value: hard to use**
Image resolution/granularity of calculations	**High Value: high-resolution images** **Low Value: Low-resolution images**
Speed of operation	**High Value: high-speed version** **Low Value: low-speed version**
Flexibility of use	**High Value: used for flexible tasks** **Low Value: used only for certain tasks**
Capability	**High Value: more capability** **Low Value: less capability**
Features and functions	**High Value: more features and functions** **Low Value: less features and functions**
Comprehensiveness	**High Value: high-end database / service** **Low Value: low-end database / service.**
Annoyance	**High Value: free of reminders** **Low Value: start-up delays or reminders**
Technical support	**High Value: individual technical support** **Low Value: less or no technical support**

Table 2: Versioning software

Vendors can maximize their profit by creating and developing software versions with maximum value and to sell these products by getting the highest value possible. For a software marketplace there are two principles in designing a product line: Vendors must offer software versions adapted to the requirements of different types of customers. Vendors have to stress the value of each software version in a way that is transparent for the customers. They must describe the particularities of the software in meta-data such as XML. There are several dimensions for versioning a software product. High value software products have a short process time guaranteed. Stock prices are of high value when customers get them in real time. The fact that customers want the latest information means that they will pay more for it. Information logistics is a way to version software components and information. High-value buyers get their information just in time, low-value buyers accept a delay. This kind of versioning will load customers to self-selection. Another possibility for a software marketplace and an ASP is to provide more powerful search capacities to high value customers.

A notable feature of these dimensions is that they often involve first building the high-end software product (the immediate, high-resolution, elaborate user-interface version) and then *degrading* it in some way to produce the low-end version.

3.2 Pricing strategies for the ASP marketplace

In order to avoid downward spiral of prices it is important to offer a non-bulk commodity. Competition among vendorsof a commodity such as digital products pushes prices towards zero [14]. Digital product commodities on the Internet like news, roadmaps, stock prices and phone numbers will be selling at marginal costs, that means they are for free. High first copy costs and low marginal costs form the online market structure for digital products. ASP marketplaces can offer a wide range of pricing differentiation following individual criteria so that customers needs will be taken into account as much as possible.

3.2.1 Price differentiation

The aim for a software marketplace like MMM is to develop a differentiated product market where a couple of firms offer the same kind of digital product, but in many different varieties. This is the only alternative to the absolute monopoly market, where one dominating firm offers a digital product by virtue of its size and scale of economies and enjoys cost advantages over it smaller "competitors". Online markets need price differentiation for competition. Differentiation of prices makes it necessary to differentiate the product as well. It is therefore important to develop a product line and different software versions. These software versions are raw digital products which must be customisable according to the buyers' requirements with added value. The aim for a software marketplace and ASPs is to create a personalised customised unique digital product resource and charge for it a price based on the value that it offers the buyer. By versioning their product, software vendorscan offer their buyers to personalise and customise the product. If the software components are highly tuned to buyers interests, vendorswill have a lot of pricing flexibility. The relation between price and sales confirms that it is better to offer several different prices rather than just one. Software vendors could sell their software to different consumers at consumer's maximum willingness to pay. Charging each customer just what he or she is willing to pay is what economists refer to as "perfect price discrimination" In the real world this optimum will never be achieved because it is awfully hard to determine what is the maximum price someone will pay for a product. That restriction automatically leads to three types of differential pricing: personalised pricing, group pricing and versioning pricing [16].

3.2.2 Personalised pricing for software marketplaces and ASPs

The main characteristic of personal pricing is the possibility of offering every customer a different price. The price each customer has to pay may depend on the quality and quantity of consumption. For MMM customers one could distinguish according to the type of enterprise (academic, small, corporate, government), the size of the organization, required databases, access time, duration time, and so on. Another option is the discount model to offer customers coupons for high revenues [14]. But by using the internet for data mining or observation ,datastream vendors can make customers special offers instantaneously based on their behaviour. A special form of personalised pricing are auctions. Auctions are very common and popular in the internet. Special software packages and promotion products auctions are very useful as well. Software marketplaces and ASPs should offer auctions to customers in addition to personalised pricing. Personalised pricing requires knowledge about individual customers. In MMM, for example, customers indicate their needs and the software product they would like to see, or the categories of information that are of interest to them. One to one communication plays a central role in this customer information source.

3.2.3 Group pricing -classical software licensing

For online software marketplaces, group pricing or classical software licensing is not necessarily the optimum solution in the context of personalization and customization of software packages. Group pricing assumes a set of characteristics constantly valid for a whole group [7]. In some cases this makes sense, when you only know one or a few characteristics of a person (such as their age). Then you can set different prices for different groups (e.g., students). But on a marketplace like MMM you are able to figure out more than only one characteristics of a customer. With MMM it is possible to offer a personalized environment and customized products. Group pricing for a software marketplace would rarely make much sense. Group pricing makes sense for a kernel software or software product, which is not customizable or personalizable. Classical software licensing models which are based on the number of current users, number of workstations, number of servers, geographic sites, types of organisation, have only one dimension for evaluation. This is not satisfying from the viewpoint of a sensible customer.

4 Conclusion

In this work we described the functions of software marketplaces and the particularities of the software product and the customers of software. We pointed out the necessary of new pricing strategies like, price differentiation, personalized pricing and group pricing. Prerequisite for the exertion of these new pricing strategies is the development of software versioning. Versioning of software products for an software marketplaces are gaining momentum but their impact on software vendors is still unclear. Concerns stem from ASP models that turn one-time purchases into monthly payments. Short-term investors may not like it when the revenue spike that results from upgrading the installed base with a new release is spread over time. Still, the long-term impact is a more predictable revenue stream. Most software vendors view the subscription model as a new channel that creates incremental business by reaching smaller companies that have not been able to afford deploying their software in the past [9]. The online software market model also reduces support costs, eliminates piracy, and creates an opportunity to sell customized, personalized and complementary software and services. Start-ups are beginning to host their applications from day one. They have no installed base and no "revenue spike" issue to deal with. Why are so many software developers considering an ASP model? Vendors cite numerous incentives. First, the traditional costs of code delivery to the customer are substantial. Hosting the application could also mean that ASPs can offer faster application modifications to customers with potentially less debugging work than before. It is possible to deliver new functionality in a just-in-time manner. Recurring-revenue charge models such as those enjoyed by ISPs are also extremely appealing to developers [10]. Even installers of traditional ERP applications, who are used to large up-front application customization charges but smaller annual maintenance fees, may be attracted to the ASP model as a way to smooth revenue bumps. Finally, a Web-based services model like MMM greatly expands the potential customer base for the ASP, conceivably offering access to the entire Internet software business market. Furthermore, the model allows the ASP to develop its own branded services explicitly for the customer, possibly creating greater dependency and therefore greater customer lock-in.

But one of the main questions is still not answered: Are the customers buying this service? Are renting applications the answer to a demand resulting from end-user problems? In order to answer this question we intend to execute an empirical analysis (questionnaire) of the German software market, in a predestined branch of small and medium sized companies. Thus we want to figure out how to raise the readiness of the customers to use an ASP solution. Results of this empirical analysis should allow the carrier of software marketplaces or an ASP to design and to construct their business concepts in a way that is accepted by the consumer.

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Appendix

Example:
calculation for an IT Outsourcing Project

I. In House Applications Management

A. One-time data center costs	
Hardware	**$5.000,00**
Web/applications server	**$3.000,00**
Database server	**$3.000,00**
Internetworking gear	**$4.000,00**
Net management station	**$4.000,00**
UPS	**$3.000,00**
Firewall	**$4.000,00**
Other (specify)	**$3.000,00**
Software	**$7.000,00**
Web server	**$1.500,00**
Operating system	**$5.000,00**
Net management	**$5.000,00**
Application (including licensing fee)	**$5.000,00**
Connection	**$1.500,00**
Internet link (installation)	**$500,00**
Redundant link (installation)	**$500,00**
ISDN backup	**$1.000,00**
Line 1. TOTAL STARTUP COSTS	**$56.000,00**
B. Average monthly costs	
Software	**$6.000,00**
Upgrades and patches	**$1.000,00**
Security (to protect apps)	**$3.000,00**
Other (specify)	**$500,00**
Connection	**$2.000,00**
Internet link	**$200,00**
Redundant link	**$500,00**
ISDN backup	**$500,00**
Services	**$6.000,00**
Third-party security	**$2.000,00**
Tape backup and storage	**$1.000,00**
Other (specify)	**$300,00**
Staff	**$10.000,00**
Webmaster (salary, benefits)	**$6.000,00**
Technical personnel (salary, benefits)	**$10.000,00**

Training	$2.000,00
Help desk (salary, benefits)	$5.000,00
Other (specify)	$3.000,00
Line 2. TOTAL MONTHLY COSTS	$59.000,00
Line 3. TOTAL FIRST-YEAR COSTS	$764.000,00
Line 4. TOTAL SECOND-YEAR COSTS	$708.000,00

II. Outsourced Applications Hosting

A. One-time costs	
Design or implementation fee	$20.000,00
Third-party consulting	$50.000,00
Systems integration	$60.000,00
Installation	$30.000,00
Training (Staff)	$20.000,00
Other (specify)	$5.000,00
Line 5. TOTAL STARTUP COSTS	$185.000,00
B. Average monthly costs	
Service charge	$10.000,00
Software package	$15.000,00
Help desk (if not included with service)	$10.000,00
Design changes	$2.000,00
Line 6. TOTAL RECURRING COSTS	$37.000,00
Line 7. TOTAL FIRST-YEAR SERVICE COSTS	$629.000,00
Line 8. TOTAL SECOND-YEAR SERVICE COSTS	$444.000,00

III. Cost Analysis

First year:	Outsourcing will save you money
Second year:	Outsourcing will save you money