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ANALYSE: THE COMPARISON OF CZECH AND FOREIGN ASP / SAAS PROVIDERS

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Abstract

This report gives an overview of the current Application Service Provider´s (ASP) market, especially the offered services. A questionnaire was sent to more than 20 companies which offer some kind of ASP / SaaS, but none of them replied. For this reason all comparisons were done only on the basis of their websites.

Chapter three gives an overview of ASP and SaaS definitions, as well as describing the differences between the two. The analysis is focused on the comparison of Czech and foreign companies. Czech companies were compared in accordance with the survey. As the foreign companies offered all services inquired in the survey given to Czech companies, comparison was instead based on the classification of the kind of ASP models offered such as business ASP, enterprice ASP, functional oriented ASP, vertical market ASP and ASP aggregators. At the end of this report, some trends in the ASP market are mentioned.

Key Words

ASP, SaaS, the comparison of the ASP market, the difference between ASP and SaaS, ASP / SaaS trends, business ASP, enterprise ASP, vertical market ASP, function oriented ASP, ASP aggregators

Introduction

This study identifies the „big players“ on the Czech and foreign markets in the field of ASP/Saas. The aim of this study was neither to address and identify all potential ASP/SaaS providers and publish the whole list of these providers nor compare or test single offered applications.

Czech companies may offer the same services as foreign competitors but the lack of information available may discourage potential customers. For example none of the Czech companies had a demo version available for potential customers to test their offered services. In my opinon every customer would like to test a service before purchasing it and in most of the examples seen below it would have been possible to have a demo version available.

In the first part of this study the general overview of ASP / Saas is given. The main part of this study is devoted to the comparison of Czech and foreign providers. Czech companies were analysed using the original survey. This was not possible with foreign companies as they provided all the services described in the survey, so instead they were compared by the various ASP/SaaS models offered.. At the end some trends are mentioned in this area.

Material and Methods

Ideally the comparison would have been based on the attached survey answered personally by each company. I contacted more than 10 Czech and 10 foreign companies, but unfortunately nobody replied to my request, so all comparisons were done soley on the basis of the particular companys' websites. This kind of comparison is not ideal as it would have been if the companies had personally replied to my survey. On the other hand it showed that the presentation of the Czech companies are far behind that of the foreign competition, seen by the detail foreign companies take in describing their services. Czech providers were taken from a big statistical list issued on http://www.computerworld.com. These_statistics represents the TOP 100 ICT companies in the Czech Republic. Foreign ASP / SaaS providers were taken from http://www.aspnews.com/top50/ and some companies were also taken from Application Service Providers in Business [11].

Czech representatives were chosen only from the TOP 100 ICT companies, which only included companies with mainly Czech ownership.

ASP versus SaaS

Aplication service provider (ASP)

An organization ASP Industry Consortium is defined as: „An organization that hosts software applications on its own servers within its own facilities. Customers rent the use of the application and access it over the Internet or via a private line connection. Also called a "commercial service provider."

According to the book [5] the definition could be further extended for:

- Applications produced by the software provider.
- Applications which could be rented and used by many customers.
- The maintenance which is carried out by an application provider.
- Services that customers can use on his or her own computer with only a web browser with a very simple friendly user interface.

ASP is one of the most discussed technology of the 21st century. The ASP future is very hopeful because the model provides a high degree of flexibility, which common software providers can not provide in the sense of „plug, use and pay what you really use“. The Czech ASP market is not very large and waits for some new inspiration. Currently applications have to be offered as a service portfolio. However, companies may fear the risk of data abuse and small companies may fear to pay the high prices for these services.

ASP models could further be sorted according to 5 basic groups [11]:

1. Business ASP – typically supply low-end, standard software applications. Support business administration processes.
2. Enterprise ASP – high level software - ERP or CRM, which could also be provided by online shops .
3. Functional oriented ASP – specific software for managing customer relationships and services in connection with www.
4. „Vertical Market ASP“ – applications fulfill complex customer requirements, such as banks and schools.
5. „ASP Aggregators“ – companies providing the whole spectrum of ASP. Application are either produced by the company itself or bought in from other ASP producers.

Software as a Service (SaaS)

The biggest SaaS advantage is the model based on the web model supported in many cases by SOA.

According to the Aberdeen Group study [10] we can recognize at least 5 hosted programmes and as a real Saas is taken only the first option – Multi-Tenant.:

Multi-Tenant – Multiple companies use the same instance of hosted software.

Multi-Instance Shared Service - Each company is given its own instance of the software but shares some common services, such as an integration platform, security, permissibility models, and/or optimization engines.

ASP (application service provider) – An application is hosted by the vendor or, more often, by an outside hosting company in a separate instance on a separate piece of hardware just for your company.

Utility ASP – An application is hosted by the vendor or outside hosting firm in a separate virtual instance just for your firm but is housed on hardware shared by multiple companies.

Hybrid – A primary application located on your company's or your trading partner's premises. Supplementary functionality provided via SaaS model.

ASP services versus SaaS

In the world of IT terms are redefined more frequent than anywhere else due to the lack of basic standards. Nowdays ASP and SaaS definitions are very often fluctuating.

Differencies between ASP and SaaS are currently the following [10, 15, 16]:

	ASP	SAS
Application design	Bought and further licenced from separate providers or hosting providing	Produced only for SaaS sellers, could be used multitenant
Time necessary for the implementation	A long cycle from installation to customization	The posibility of easy customization for all customers using this service.
Multitenant model	Every customer has his data separated from other customers. Single applications are placed on separate servers.	Applications are created to be able to use multitenant and they are available for more customers. Data could be placed on one server.
Upgrade and extension	ASP is mostly depended on the software producer, the upgrade is limited and it is usually done once a year.	Upgrade and extensions could be placed into the datacenter and the customer could choose to use it or not.
Integration	Can be integrated via the HTML interface	Can be integrated via the XML interface
IT support	Depends upon the customization and integration level	Is included as a part of the provided service
Costs of service	Very limited possibility to share costs.	Costs of software, hardware, networks are shared by companies using this applications.

Table 1: Differencies between ASP and SaaS

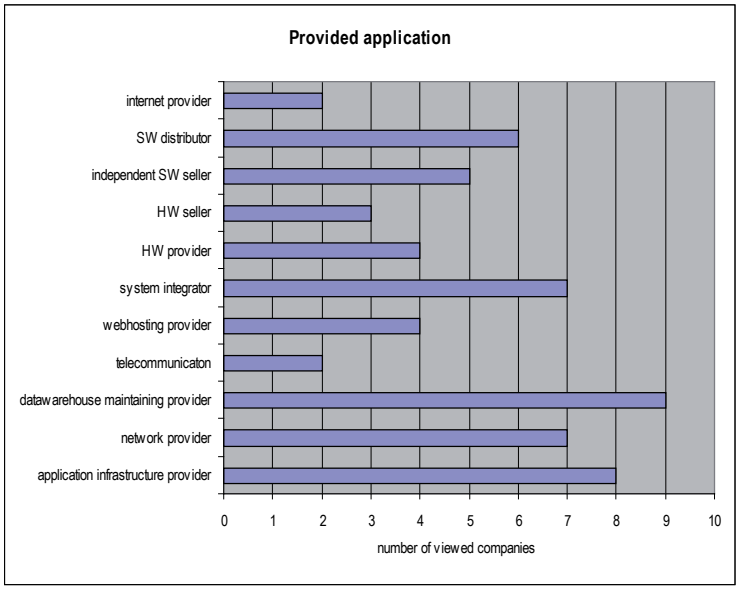
Results - The comparison of Czech and foreign companies

Chosen Czech ASP providers survey

First we will look at the comparison of Czech ASP providers. The choice of companies alone was very difficult as Czech companies, contrary to their foregin counterparts, do not have a detailed description of the services they provided on their website. Only Czech companies with the minimum of foreign ownership were taken as a sample. The survey below was sent to these companies and all companies were kindly asked to complete this information. Unfortunately none of the company replied to this request. Due to this the description was fulfilled only on the basis of their websites. The list of all companies is mentioned in table 2.

Company name	The company revenue (in mil. Kč) in 2005	The application infrastructure provider	Network provider	Datawarehouse maintainence provider	Tele-communication company	Web hosting provider	System integrator	Hardwar provider	Hardwaru seller	Independent software seller	Distributor with added value	Internet provider
PVT www.pvt.cz	1 018											
	Main customers: SCP, Ministry of Finance, Třinecké metalworks, ČSOB - bank											
GC SYSTEM www.gcsystem.cz	956			X								
	Main customers: Carefour, Ahold, HVB bank											
AUTOCONT www.autocont.cz	2 613	X	X	X			X	X		X	X	
	Main customers: kooperativa, Health Insurance company, ASPI Publishing, Telefonica O2											
UNICORN www.unicorn.cz	779	X	X	X	X	X	X	X	X	X		
	Main customers: Česká spořitelna, Komerční banka, Česká pojišťovna, COCA COLA beverages ČR, Raiffeisenbank											
ANECT www.anect.cz	755	X	X	X			X				X	
	Main customers: DHL, Ministry of labour and social affairs, Česká pojišťovna											
INFINITY www.infinity.cz	431	X	X	X			X				X	
	Main customers: Tesco, ČÚZK											
NWT COMPUTER www.nwtcomputer.cz	378	X	X	X		X	X	X	X	X	X	X
	Main customers: GE Capital Leasing, Uniqua pojišťovna, Prague castle administration, Sykora											
LOGOS www.logos.cz	299											
	Main customers: ČSOB, Komerční banka											
SKYNET www.skynet.cz	201	X	X	X	X	X	X	X	X	X	X	X
	Main customers: it was not mentioned											
VEMA www.vema.cz	116	X	X	X		X	X			X	X	
	Main customers: ČSOB, Health Insurance company - VZP											

Table 2: The list of Czech companies



Graph 1: The list of provided application by individual companies

Selected criteria for the evaluation of Czech companies

To be able to classify Czech companies, the following survey was completed based on website data [13, 17, 2, 3]. All companies were evaluated based on survey results. The survey consists of the following criteria:

1. Technology architecture - examines whether the SaaS vendor has employed a technology architecture specifically designed for Web performance and rolebased security. When viewing demos and conducting reference checks, the speed at which application interface screens refresh and queries are answered and what type of connection is being used to access the SaaS application was evaluated.
2. Strategy, mission and vision of the company.
3. References - examines any references available on their website from customers who have used their services.
4. Flexibility – exames the possibility to rent only a part of an application or if customers have to rent the whole application without the possibility of any changes.
5. Enhancement process - looks at whether the SaaS vendor has a faster enhancement cycle than a traditional software vendor.
6. Training approach such as on-line tutorials- evaluates whether the SaaS vendor has created an on-demand model of training to match its on-demand application approach. For instance, some SaaS vendors have created voice-directed self-training modules that can be accessed by users over the web. This same process can be used to educate users on enhancements when new versions of the software are released.
7. Customization approach – exames the ability of

customization of applications Most SaaS vendors limit customization and instead use web technology to enable customers to create unique configurations of the application. For hard-core customizations, a few SaaS vendors provide toolkits for application extensions, enabling unique code to be written.

8. Community benefits- evaluates whether the SaaS solution enables community benefits such as industry benchmarking, business partner discovery (e.g., identifying appropriate suppliers or carriers), or group buying power. Multi-tenant architectures are intrinsically constructed to make community benefits easier to achieve, while gaining these benefits from an ASP model is more challenging, though not impossible.
9. Security and reliability of hosting environment - examines the ability to have your IT organization assess the security and reliability of the vendor´s hosting environment. Evaluates the actual outages for scheduled downtimes as well as the unplanned downtimes. Also looks at assessability of backup and disaster recovery plans.
10. Internal integration capabilities - ensures that the vendor has proven integration capabilities to back-end systems with its SaaS offering. They also will support integration with your enterprise portal environments (or your customer-facing or supplier- facing portals).
11. Ease of application upgrades - examines how will your company be alerted to new application versions and enhancements. Are new versions and software patches released on a set schedule or will they appear on a rolling, ad hoc basis (which may be preferred by companies seeking to access new innovations or product extensions)? Many SaaS vendors will automatically ensure that your company is always on the most current version so you can exploit the latest functionality and thus run more advanced business processes than competitors.
12. Current legislation – looks at the ability to run the application under the most current legislation (accounting, tax laws, ..).
13. The use of Service Level Agreement (SLA) – looks into the diversification of the helpdesk, networks, systems, applications and dta security.
14. Help desk – analyzes the help desk provided to customers
15. Services – looks at the list of provided services (if it is only SaaS, ASP or if it also includes internet connection, etc.).
16. Application pricelist (and their comparison).
17. Trial – examines the possibility of a demo version of the available applications.
18. Quantity – evaluates how many customers can operate at one time on one given server (or application, etc.).

The survey interpretation

In general ASP services provided by Czech companies and their web presentations are very poor. Most of the points set in the survey are not included on the website and many companies do not offer them at all. As stated above, none of the Czech companies have replied to this questionnaire. For this reason the Czech ASP market was mapped only on the basis of the company´s websites. The ASP focus in the Czech Republic is mainly banks and public administration.

1. Technology architecture - all mentioned companies except PVT describe what kind of application they use and what kind of hardware platform is needed. It was not possible to

try neither the speed of the application nor information on how to access the applications. Only very basic descriptions were given.

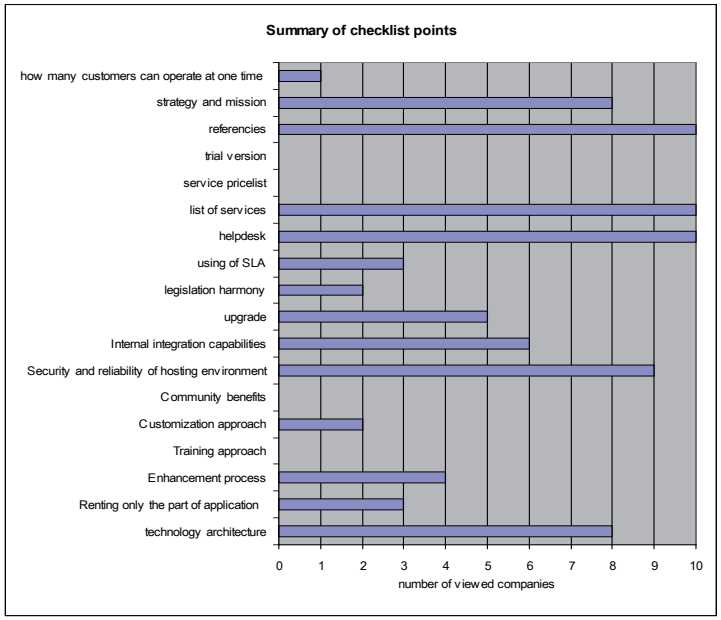
2. Strategy, mission and vision of the company - this point was described by almost all companies.
3. References - companies consider this category probably as the most important and all companies provided reference to their succesful projects.
4. Flexibility - the possibility to rent only part of application was offered only by 3 companies. Unfortunately they did not specify what part of the application could be used.
5. Enhancement process - companies did not provided any information regarding the enhancement process or only very little notes were given without any further specification.
6. Training approach such as on-line tutorials - tutorials could help customers better orientate themselves to a new application. None of the companies provided tutorials. On the basis of website presentations there were not any remark regarding on line tutorials.
7. Customization approach - the customization approach was described only by 2 companies.
8. Community benefits - none of companies mentioned this possibility.
9. Security and reliability of hosting environment - most of companies described the communication between the server and the client, whether they use encryption and security protocols and how the authorization is carried out.
10. Internal integration capabilities - approximately half of the companies stated that integration is provided automatically, but a detailed description was not presented, with the exception of Autocont.
11. Ease of application upgrades - only some companies presented this possibility even though it should be given automatically.
12. Current Legislation - the legislation harmony was mentioned only very rarely even though it should be included into the SLA conditions.
13. Using of Service Level Agreement (SLA) - only 2 companies had a small note regarding SLA.
14. Help desk - help desk was mostly described everywhere, with 2 level of the support.
15. Services - services were mentined by all companies.
16. Application pricelist - only one company mentioned the price of the provided service. It seems that one of the most important criteria was missing from most of the examined websites.
17. Trial - there were no possibilities to try a demo version nor any application preview.
18. Quantity - this criteria was not mentioned by any company.

Generally most of the points in the survey were not mentioned at all. Mostly companies mentioned only a lot of references, the list of provided services, and the company´s vision and strategy. The overall summary is given in the table below. Numbers on the top of the table correspond to single points of the given survey.

Checklist / Company	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
PVT		x	x											x	x			
GC System	x	x	x		x				x	x	x			x	x			x
Autocont	x	x	x	x	x		x		x	x	x	x		x	x			
Unicorn	x	x	x	x	x		x		x	x	x	x	x	x	x			
Anect	x		x						x	x	x		x	x	x			
Infinity	x		x						x					x	x			
NWT Computer	x	x	x	x	x				x	x	x			x	x			
Logos	x	x	x						x					x	x			
Skynet	x	x	x						x					x	x			
Vema	x	x	x						x	x			x	x	x			

* X means that the company does not complete the point of the checklist.

Table 3: The summary of checklist points



Graph 2: The summary of checklist points

Exploring the effectiveness of the ASP / Saas

The ASP / SaaS effectiveness can be measured by the method of critical success factor (CSF) or balance score cards (BSC). All hereabove mentioned criteria can be taken as a basis. Each measure or criteria should be reviewed with the view of each actor, clients and ASPs, because the actor related with each perspective is distinct. All measures can be divided into 3 perspective - business value, client perspective and internal process perspective. Business value estimates risks of the ASP service, unexpected transition and management, number of pricing changes by ASPs. The criteria of security and trust is

also very important, because data center is located outside the company. Therefore they are afraid of loss of information and data. If clients did not have trust about ASP security, they could not utilize the ASP service. Effectiveness of the ASP / SaaS process can be evaluated ratio of reworks, time spent to repair bugs and fine-tune new application, and on time service. A well-developed performance measurement system may give signals to senior management that something is wrong and that an ASP strategies has to be considered again. Criteria provide not only a tool which makes clients evaluate the ASP service effectively, but also a tool which makes an ASP concentrate on economic number of success factors. When we acquire the value per each critera, the effectiveness of the ASP service can be evaluated with total score which represents integrated value of all measures. However, the model for calculating total score having the value of multidimensional measures is not considered in this research, because this area is not our interest. We suggest that further research should investigate measures in larger scale case study to validate whether these affect mission or CSFs.

Results - The overview of foreign ASP / SaaS providers

Foreign ASP providers are advanced and services are more popular among companies than in the Czech Republic. While the Czech ASP offer is still at its beginning and companies offer very simple applications, foreign companies offer not only global applications but also to provide complete outsourcing of all supported process. In this cases we can speak about the Business Service Providers (BSP).

Originally the survey should have been carried out the same way as in the comparison with Czech companies, but the amount of companies offering ASP abroad is inexhaustible and all top companies fullfill all points of the given checklist. From that reason, it was not very useful to extract points from the survey just to state that all points were completed Instead the survey was focused on the chosen ASP models. ASP models were divided the following way:

1. Business ASP.
2. Enterprise ASP.
3. Functional Oriented ASP.
4. Vertical Market ASP.
5. ASP Aggregators.

In the following paragraphs representative companies of each model are chosen and their services are described. By each model the technology, services, references and the territorial scope is listed.

Business ASP

Business ASP provides prepared application for general business use. They target small and medium sized companies. The biggest providers are given in the following table:

Company	Provided application	Technology	Territorial scope	Reference
Interliant www.interliant.com	Wide scale of ASP including Exchange/Outlook, Domino with complete web support. Implementation, full web oriented applications.	Microsoft Windows NT, Unix, Sun Microsystems´Solaris	USA and branches in the UK and France	online encyclopedia World Book Online, Beacon.
Future Link www.futurelink.com	All application suitable for Microsoft Terminal Server or Citrix Metaframe	Administrative applications with a partnership among Compaq, Citrix, Microsoft	USA, Canada, Europe	Watson High School, KIK Corporation
Mi8 www.mi8.com	Microsoft Exchange/Outlook with an extension of virtual office enabling the access from anywhere, wireless access.	Microsoft, ThinAirApps, Compaq, Cisco, Digex, AT&T, Citrix	USA, UK	Small companies, law firm Mc Conell and Associates, Cornell University´s School of Management
TeleComputing www.telecomputing.com	Offer more than 200 applications, including Microsoft Exchange and Office 2000	Microsoft, Citrix Systems, Exodus, Compaq	Europe, Norway, Sweden, USA	More than 400 medium sized companies: West Fish Norwegian Salmon, Confex

Table 4: the „BUSINESS ASP" provider´s overview

All these models have very little possibility of customization and integration for customers. Most are limited, predefined services and only some of them are able to satisfy the need of an entire company.

Enterprise ASP

Here we can assigned different ERP and CRM systems and e-commerce applications. Contrary to the previous group, these applications include a wide range of business use, and customization goes without saying. This group of providors mainly target large and medium sized companies.

Company	Provided application	Technology	Territorial scope	Reference
Agilera www.agilera.com	e-commerce, implementation possiblity, supported by SLA, Business Inteligence. Specialized for industry, finance services and retail stores.	Ariba, BroadVision, Oracle, CRM from PeopleSoft, ERP Lawson, SCM from J.D. Edwards	USA	Flash Electronics, MD Helicopters
Corio (in 2005 merged with IBM) www.ibm.com	e-commerce, implementation possiblity, supported by SLA, Business Inteligence. Specialized for industry, finance services and retail stores.	Ariba, PeopleSoft, Microsoft, Oracle, SAP, Siebel Systems (CRM), BroadVsion (e-commerce)	USA with many branches all over the world	Peppers and Rogers Group, Enporion
Interpath www.interpath.com	e-commerce, the whole package from implementation and maintenance to internet providing.	SAP, CRM aplikace, Cisco Systems, IBM, Nortel Networks, Sun Microsystems - technologie, Microsoft, Pivotal - application	USA,Australia, with branches in Europe	Pharmaceutical company Bayer, Greenville Utilities, Manpower, UPS

Table 5: the „ENTERPRISE ASP" provider´s overview

Function oriented ASP

This kind of ASP is very specific for industry, production, and the financial sector. It targets the characteristic problems and professional activities in a company with data analysis and special management software. Only the part of application could be used and they specialize in only a few processes in a company.

Company	Provided application	Technology	Territorial scope	Reference
Employease.com www.employease.com	HRM application up to 3000 employees, they support the service which would meet all of a customer´s needs.	It was not mentioned	USA	Small and medium sized companies. PSS/ World Medical, Works. com
NetLedger www.netledger.com	Small and medium sized companies. Specialization for the financial, e-commerce, ERP	Oracle, partnership with ADP, Yahoo!	USA, Canada	Open Door Technology, Alan George and Associates
Outtask www.concur.com	Can provide a whole portfolio of applications, which could be used separately or as a whole.	A strategic partnership with CyberCFO, Grant Thornton	USA, merged with Concur Technologie´s	Electrolux, Polaroid, Ericsson, McKinley Marketing Partners
United Messaging www.unitedmessaging.com	Web applications	Microsoft Exchange, Lotus Domino - applications, Sun Microsystems – technology	USA, UK	Thomas Jefferson University, Trustmark, Centocor

Table 6: the „FUNCTION ORIENTED ASP“ provider´s overview

"Vertical Market" ASP

These applications are characterized by a very small number of customers with specific needs in the field of hardware, software, system, and services. Products are determined by specific activities such as educational and health service. These kinds of applications are characterized by the specialization and expensiveness of the customer's need.

Company	Provided application	Technology	Territorial scope	Reference
Portera www.portera.com www.exigengroup.com	Provide full web applications.	Oracle, Microsoft - application, Avasta, Cisco Systems, Storage Networks	USA, Canada, Latvia, Russia, Australia	More than 250 companies. McLaren Consulting, AvantGo
TriZetto Group www.trizetto.com	Web applications in health services.	Didn't mention	USA	150 companies with more than 70 thousand of patients Eye Clinic of Wisconsin, Talbert Medical Group
LearningStation.com www.learningstation.com	Web applications in educational services, online tutorials, and application for teachers and students.	Microsoft, Tom Snyder - application, Qwest, EarthLink - technologie.	USA, Canada, Australia	More than 144 schools with 23000 pupils. Lowcountry Day School
Fullscope www.fullscope.com	Targeted for industrial production. Online services of – CAD, project management	Microsoft, BAAN - application, UpShot Inc., Sunset Direct-technology	USA	Komatsu America
SalesForce.com www.salesforce.com	Targeted for financial services, CRM		USA, Europe	Merrill Lynch, CA, Hawaiian Airlines, AMD

Table 7: „VERTICAL MARKET ASP" provider´s overview

„ASP Aggregators“ – companies which provide a different kind of ASP

Companies integrate various kinds of ASP and provide them as a whole in the accordance with the customer's branches. They can provide many ASP „under one roof“ with one single access point.

Company	Provided application	Technologie	Territorial scope	Reference
Jamcracker www.jamcracker.com	Various applications with one access point.	They cooperate with more tham 20 important ASP producers.	USA	B2Bworks, Vitria, Digital Island
eZigma www.ezigma.com	Web application in the field of HR, finance, international trade, …	They cooperate with applicaton vendors as well as with companies who provide infrastructure.	USA	Newhomesmedia
iFuel www.cantono.com	Approximately 50 various applications which can be used via a web interface.	Citrix, RSA Security	USA	Applications for more than 11 000 customers. Onyx

Table 8: „ASP AGGREGATORS“ provider´s overview

Most of the companies use a „best practices“ method to be able to meet customer´s needs, which are presented on their websites. It is mainly SLA, customer´s support and data security. „Best practices“ can be summarized by following:

- The designed system has to be complex with fast accessability and data security.
- All provided services have to be covered by an SLA agreement. SLA enable to track whether all applications work at the optimal level and if a customer pays only what he uses.
- Data security has to be monitor at all times in connection with the data back up system.
- The regular customization must be readily available.
- It is neccessary to use the multi tenant model. Applications are produced so that many customers may use them at one time.

All applications are we applications.

Current internet giants - Google, eBay, Amazon

In the above mentioned list „internet giants“ such as Google, eBay and Amazon are not mentioned, as this study is targeted towards companies which provide the complex applications of some of the field's branches such as HR, finance or logistic. In my opinion no one provides applications for business process controlling. Ebay provides e-business on the basis of auction sales. Google provides an email client and “searching” software which are SaaS. On the other hand, it now provides “Google Desktop” and “Google Earth”, which needs to be installed onto a computer which puts to question whether it is still SaaS. In present days Google has been expanding, making some wonder when they will start to offer some kind of ASP or SaaS services. It could also help them merge with SalesForce.com company, which has recently been considered.

Discussion - The ASP/ SaaS future

The original aim of this paper was completed only in part because the comparison of the Czech and foregin market was not possible. The study should have been comprised from the returned questionnaire, but as no one from the addressed company replied, only the information available on the companies' website was compared.. Due to the fact that Czech companies for the most part do not have any description of provided services, no possiblity to try the application, no price estimation, the comparison is by far not complete. On the other hand foreign companies were not compared according to the same survey as Czech companies as they fullfilled all points of this survey, making the comparision pointless. This is why foreign companies were compared according to separate ASP models.

None of companies provide straight SaaS, but instead offered services including ASP as a whole. It was also very diffucult to choose a presentable sample because the question is whether or not the provider is also the company who offers internet connection and gives the possibility for webhosting. This study was primarily targeted for companies who offer global solution in the field of information systems for human resource, economy or logistics. The basic difference between foreign and Czech companies was the more sophisticated strategy on part of the foreign companies ability to present tutorials and demos. The potential customer can be in a position to try how a single application works. This kind of strategy was not mentioned by any of the Czech company. Another problem of the Czech companies is providing a guarantee covered by SLA. The suggestion of SLA was from time to time given on a Czech company's website, but details were never described. Due to the the globalization and the uniformity of the society we can be very optimistic regarding either ASP or SaaS services as it seems that both will be successful without saying.

Gianpaolo Carraro, the leader of Microsoft SaaS writes in his blog that Microsoft (8th of February 2007) issued a sample SaaS application, a fictional HR software. He stated that it does not matter what the software does, but how it goes about doing it. During the next few years it is possible that SaaS will be an integrated part of business SOA and it is obvious that SaaS/ASP will be shifted from individual applications to integrated solution „under one roof“ as companies become ASP aggregators. This situation is also supported by the general globalization, including the fusion of big companies. One of the problems when you decide to use ASP / SaaS could be the concern regarding data security. If a company places data on a

hosting server, it does not want to rely on a small supplier, which is only on the market for a few years. But can we really recognize which supplier will be successful and secure and which will not? One of the criteria could be, for example, a technical model of hosted software, customer references or the company vision. To be able to be sure which supplier is reliable, it is necessary to find somebody who is on the market for a long time or who merged with one of the bigger companies (Microsoft, Oracle, IBM, …). However, as larger companies merge, smaller ones go under. Larger companies have better services and set security standards, accessibility etc. at the highest level. Small ones become smaller, more risky and at the end are most likely to go under. All want the best and the safest services, confidence being the most important. Everybody follows what was first done by Google and is currently the most discussed. The company has more customers, with more stability, quality, etc and (with more and more companies merging) the market monopolization is increasing.

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