Analysis of the Romanian offer of ERP solutions

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ANNALYSIS OF THE ROMANIAN OFFER OF ERP SOLUTIONS

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This article tries to make an analysis of the actual Romanian offer of ERP (Enterprise Resource Planning) solutions. In the first part of the article the level of ERP adoption by Romanian companies having as main sources two studies published in 2006 about the ERP market in Romania, namely: "ERP Romania 2006" by Pierre Audoin Consultants (PAC) and the second one made by the media company Agora Media and the market research company Sensimark. In the second part of the article a comparative analysis of the first seven best placed ERP products on the Romanian market will be made. In order to accomplish this analysis a synthesized table has been included with all 7 products together with the analysis criteria grouped in three categories: function, technical characteristics, and market segment that it addresses.
Keywords: ERP, accounting software, ERP software provider

Introduction

Romanian IT and software market has had an accelerated development in the past few years, ERP solutions seeing a great increase, as shown in the first study about Romanian ERP software products and additional services - "ERP Romania 2006" done by PAC[1]. The study shows also that the fact that the market emerged three or four years later than other countries in the region like the Czech Republic, Hungary, Slovakia, Poland, this being the difference also in the degree of maturity of the ERP market. The present state of development is relatively low, although the economic potential is much greater than in the mentioned countries. This is explained by a growth of over 30% seen on the Romanian ERP market between the years 2004 and 2005, the market being estimated at a total value of 87 million Euros, where the software products and additional services share a near equal quota.

Facts about adopting ERP solutions by Romanian companies

In what regards the situation of adopting ERP software solution in Romanian companies, this is situated still at a low level. According to the study[2] made in 2006 by Agora Media in partnership with Sensimark, 42,9% from the companies which are over one million dollar worth, had an ERP solution implemented, whereas 14,9% of them were in different stages of implementation of such a solution, the biggest concentration being in Bucharest. The rest of 42,2% from the companies did not have such a solution. It is understandable why this high percentage if, 23,2% from the companies that did not implement an ERP system, never

1 Pierre Audoin Consultants is an European consultancy company specialized in strategies for organizations in software industry and IT services.. PAC was founded in 1976 in Paris and it currently covers 20 European and US markets from its five branches in Paris, Munich, Bucharest, London and New York. The branch in Bucharest is active from six years and it covers the main markets in the central and eastern Europe - Czech, Poland, Romania, Russia, Slovakia and Hungary (http://www.pac-online.com)

2 Agora Media, in partnership with Sensimark – market research company, has made in 2006 its first national study regarding the use of business management software (ERP type) in non –IT environment. The market research was designed and accomplished on the segment of companies having a net worth of over one million dollars, no matter of type of industry. 320 company representatives were interviewed and representativity was ensured at national level.

acknowledge the existence of them, and approximately 18,8% have heard of such solutions but do not understand the utility, functionality or importance of such products.

Excepting the banking and pharmaceutical system, the most companies who have implemented an ERP system, 64,8% are in production area, 57,6% in distribution area and 53,3% in retail. This classification is normal taking into account that generally, the emergency of implementing an ERP is mainly for companies that are confronted with high data fluxes.

What is extremely relevant for the degree of development of the ERP market in Romania is the fact that only 20% from the implementation cases covers all the functions of the business. Where the functions are partially covered, the highest degree of coverage is by far that of financial and accounting. The accounting and financial activities are found in approximately 80% of all ERP implementations. There is a second echelon which is payment, analysis and reports, production, retail, marketing. A weaker implementation of strategy modules is noticeable which demonstrates once more the "basic level" at which ERP systems are understood and implemented (table 1).

Table 1 **The most frequently implemented ERP Modules**

THE MOST FREQUENTLY IMPLEMENTED MODULES	
Accounting Module (accounting, financial analysis)	77,2%
Payroll Module	60,4%
Reporting and Analysis Module	57,8%
Manufacturing Module	49,1%
Marketing and Sales Module	48,9%
Fixed Assets Module	42,6%
Budgets and Projects Management Module	34,4%
Manufacturing Processes Launch and Control Module	32,8%
All Modules (full integrated solution)	19,9%
Supply Module	15,2%

Source: Study [AgoraMedia&Sensimark, 2006]

The very big gap between the degree of implementation of the accounting module and the other modules demonstrates the fact that many IT solutions existent on the market are presented as ERP and are considered as such by the customers, due either to their ignorance, or to the lack of perspective in what sees the development of IT services for their businesses. Another proof in this respect is the opinion of companies in what regards the implementation of these systems. The majority of 59,7% prefer a partial implementation by modules and only 34,7% would actually go for a full implementation.

Among the companies that do not have an ERP implemented, 38,4% of them mostly want to implement the financial and accounting module, second, in 31,8% of the cases is the analysis and reporting module lacking a support tool to decision.

For the next years it is estimated by the PAC study that, the medium segment of the market will see the most dynamic and rapid development generating 35% from the incomes of ERP products. The potential of this segment is proven by the interest of two giants from the worldwide ERP market: SAP and Oracle that have included a short while ago on the Romanian market their version of product designed for small and medium enterprises. Still, most part of the market is estimated to be dominated by implementations for large companies.

ERP solutions will not conquer very soon the sector with the most number of companies in Romania, that is the small and very small ones. Among these there are not many companies who truly understand what an ERP solution mean, their immediate needs being limited to the necessity of accounting being done on computers by acquisition of software products for accounting, which are most of the time offered by local software producers for a small amount of money, like a few hundred euros. Even more, there are still a great number of small companies that are working with Microsoft Office (Word, Excel) or externalize this function to some specialized companies or licensed accountants. Thus, PAC estimates a decline in the market quota on this segment, to less than 10% from the total ERP market, although the number of small companies is huge in comparison to that of medium and large ones.

Analysis of Romanian ERP solutions

Romanian software companies, offering cheaper and quicker to implement products, covers the small and medium market with limited IT budgets. The number of local ERp producers is relatively high (see Annex 4 – where a good part of them is presented), their majority being concentrated in Bucharest. Excepting a few products who have become known on the market: Siveco Applications, Charisma, B-Org, Socrate+, Clarivision, all others are very few known. This thing is easily understandable, seeing that over 40% of the companies that have implemented an ERP system never heard of such solutions and if they heard of, do not understand the utility, functionality and importance of them [Agora&Sensimark, 2006].

On a market that is very less prepared for such systems, many of the existing Romanian ERP products are still immature, their development starting in most cases two or three years ago. From this point of view Siveco Applications is the most “baked”, its development starting twelve years ago. Also, very few of the producing companies have representatives in more areas of the country and very few work with partners to insure service linked to their implemented ERP system, consultancy, maintenance and training. The small number of customers and limited functionality come to fortify the idea of products in incipient development state.

Table 2 **Some Romanian ERP Solutions**

No.	Company name	ERP Solution name	Foundation year	City	Customers	Representatives	Dealers	ISO 9001:2000 9001:2001	Employees	Web adress
1	ADCOS Romania SRL	AIS	1996	Bucureşti	N	0	0	NO	N	http://www.adcos.ro
2	ALFA Software SRL	ASIS	1990	Zalău	65	2	16	In course	N	http://www.asw.ro/
3	APLIX Software SRL	APLIX[3]	1999	Braşov	N	0	0	NO	N	http://www.aplix.org
4	ASSITEC SRL	HANSA	1994	Timişoara	N	0	0	NO	N	http://81.12.255.174/index_n.htm
5	Atlas System SRL	MyERP	2005	Bucureşti	N	0	0	NO	N	http://www.my-erp.ro/
6	BIT Software SRL	Socrate+	1993	Braşov	100	1	12	YES	N	http://www.bitsoftware.ro
7	Chara Software SRL	Syntesio	2004	Bucureşti	N	0	0	NO	N	http://www.syntesio.ro
8	CRIsoft SRL	CROS	1991	Braşov	100	1	0	YES	60	http://www.crisoft.ro/
9	EBS Românina SRL	ERP Clarivision	2000	Cluj Napoca	N	3	9	YES	150	http://www.ebsromania.ro/
10	ECSO & EXO SRL	EXMAN	1992	Bucureşti	400	0	0	NO	N	http://www.ecsoexo.ro
11	EXPERT Software Group SRL	Expert X5	1996	Oradea	500	4	0	NO	N	http://www.expert-software.ro
12	Integrator Soft SRL	Clarus ERP	1996	Braşov	N	0	0	NO	30	http://www.integrator.ro
13	JulSoft Group SRL	Reports Manager	2001	Bucureşti	100	0	0	YES	N	http://www.jsg.ro
14	KeySoft SRL	KeySoft ERP	2001	Bucureşti	N	0	0	YES	N	http://www.keysoft.ro
15	Multi Soft SRL	AZet	1990	Bacău	N	0	0	NO	N	http://www.multi-soft.ro/
16	Nethrom Software SRL	.Networker ERP	1993	Cluj Napoca	N	0	0	NO	120	http://www.nethrom.ro
17	Omnis Group SRL	ISIS.net	1990	Bucureşti	N	0	0	YES	50	http://www.omnis.ro
18	Prodinf Software SRL	EMSYS	1990	Piteşti	100	1	0	YES	N	http://www.prodinf.ro
19	Progressys Software SRL	Progressys.ERP	2005	Bucureşti	N	0	0	NO	N	http://progressys.ro
20	QCT Connect SRL	iqERP	1998	Timişoara	N	0	0	YES	N	http://www.qctconnect.ro

[3] Solution based on Open Source technologies

No.	Company name	ERP Solution name	Foundation year	City	Customers	Representatives	Dealers	ISO 9001:2000 9001:2001	Employees	Web adress
21	Qube NET SRL	QManager ERP	2003	Bucureşti	N	0	0	NO	N	http://www.qube.ro
22	Romfast SRL	ROA Romafast Applications	1991	Constanța	N	0	0	NO	N	http://www.romfast.ro/
23	SAN Software SRL	SAN.ERP	1995	Braşov	65	0	0	YES	24	http://www.san.ro
24	SC Soft & Service SRL	Synchron	2003	Iaşi	30	0	0	YES	N	http://www.softservice.ro
25	SC TotalSoft SRL	Charisma	1994	Bucureşti	140	0	0	YES	250	http://www.totalsoft.ro/
26	SC Transart SRL	B-Org	1998	Cluj Napoca	200	3	30	YES	N	http://www.transart.ro
27	Senior Software SRL	Senior.ERP Suite	2003	Bucureşti	40	0	0	NO	50	http://www.seniorsoftware.ro
28	Sistec SBsol SRL (desprinsă din RTC Holding)	Cogito3	2005	Bucureşti	40	1	0	YES	150	http://www.cogito-erp.ro
29	Siveco România SA	Siveco Applications	1992	Bucureşti	200	0	0	YES	500	http://www.siveco.ro
30	TeamNet SRL (membră grup ASESOFT)	Optimus ERP	2001	Ploieşti	N	0	0	YES	100	http://www.teamnet.ro
31	WizRom Software SRL	WizPro	1992	Bucureşti	100	2	7	NO	N	http://www.wizrom.ro

N - undetermined

Of all Romanian ERP producers, the group of best qualified, consist of: Totalsoft, Wizrom, CriSoft, Transart, BIT Software, EBS. These companies, owned together a quota of approximately 12% in 2005 (soft and service included). In comparison, SAP Romania owned 28,3%, and Oracle Romania 17,4% [PAC, 2006].

Apart from the six Romanian producers mentioned, among the local producers the best qualified on the segment of customers with more than 250 employees is SIVECO (19,3% of market), the only local producing company of integrated ERP solutions that has managed to implement of its Siveco Applications solution, of many million euros in very large companies such as: PETROM, Orange, Raiffeisen Bank, Citibank, Aerostar Bacau, TERMOELECTRICA.

Following, Table no 3, will present a synthesis of products offered by mentioned companies and their functionality.

Table 3 **Comparative analysis of the most sold out Romanian ERPs**

	Siveco APS	**Charisma**	**B-ORG**	**ERP Clarivision**	**Senior ERP Suite**	**Socrate+**	**WIZPro**
General accounting	√	√	√	√	√	√	√
Management Accounting	√	√	√	√	√	√	√
Consolidations Accounting	√	√	√	√	√	√	√
Management of fixed assets and inventory objects	√	√	√	√	√	√	√
Cash and payments	√	√	√	√	√	√	√
Stocks management	√	√	√	√	√	√	√
Supply management	√	√	√	√	√	√	√
Sales management	√	√	√	√	√	√	√
Manufacturing management	√	√	√	√	-	√	√
HR and Payroll	√	√	√	√	√	√	√
Warehouse management and logistics	-	√	-	-	√	√	-
Post sales services and assurances management	⇒	√	√	-	√	√	√
Transportation management and logistics	√	-	-	-	√	√	-
Maintenance	√	-	-	√	√	-	-
Retail	⇒	√	√	√	-	√	-
Budgets management	√	√	-	√	√	√	√
Project management	-	√	-	-	-	-	√
Documents management	√	-	-	√	-	-	-
Workflow management (workflow technology)	√	-	-	-	-	-	-
E-commerce	-	-	√	-	√	√	√
CRM (Customer Relationship Management)	-	√	-	-	-	-	√
SFA (Sales Force Automation)	-	√	-[4]	-	√	Θ[5]	-

[4] Transart SRL offers onother independent product for sales force automation : HERMES.

	Siveco APS	Charisma	B-ORG	ERP Clarivision	Senior ERP Suite	Socrate+	WIZPro
Enterprise Portal	-	-	-	-	-	-	Θ[6]
Working with mobile devices	-	√	-	√	√	√	-
SCM (Supply Chain Management)	-	-	-	-	-	-	-
Windows Interface	√	√	√	√	√	√	√
Web Interface	√	√	-	-	-	-	√
Reporting and economic and financial analysis Tool	√	√	√	√	√	√	√
Multidimensional analysis (OLAP Tool)	√	√	√	√	√	√	√
IAS (International Accounting Standards) Reporting	√	√	-	-	√	-	-
Tools for collaborative work							
Email	-	-	-	-	-	-	√
Instant messaging	-	-	-	√	-	-	-
Task Manager	-	-	-	√	-	-	-
SMS	-	-	-	-	-	-	√
Notification Service	-	-	-	-	√	√	√
Client-Server Architecture							
3 Thier (nThier)	√	√	√	√	√	√	√
Operating system							
Windows	√	√	√	√	√	√	√
UNIX	√	-	-	-	-	-	√
Other	-	-	-	-	-	-	-
Database Management System							
Oracle	√	-	-	-	-	-	√
Microsoft SQL Server	-	√	√	√	√	√	√
Other	-	-	-	-	-	-	√[7]
Industrial development							
Manufacturing	√	√	-	√	-	√	√
Distribution	√	√	√	-	√	√	√
Retail	√	√	√	-	-	√	√
Services industry	√	√	√	-	-	√	-
Auto industry	-	-	√	-	-	-	-
Construction industry	-	√	-	-	-	-	-
Import	-	-	-	-	√	-	-
Market segment addressed							
Small companies	-	-	-	-	√	-	√
Medium companies	√	√	√	√	√	√	√
Large companies	√	-	-	√	√	-	-

[5] allows integration with the following solutions: Arobs Optimal SFA, Digital SFA, Optima
[6] allows the integration with Microsoft SharePoint Portal
[7] Tabula – WizPro propietary database management system

Legend:
√ - supported
__ - not supported
⇒ - available in future
Θ - integration with third party solutions

From the synthetic table presented, a good coverage of these products can be noticed, of the basic processes that take part in an organization: accounting, financial, supply, retail, personnel and payment, fixed assets management, warehouse management. Apart from this nucleus of basic applications, which any ERP should include, there is a series of other modules developed by the producing companies to suit industrial development to which it is addressed: retail, production, services, etc. In the case of the seven solutions, a timid development can be noticed addressing only a few domains. Also, pretty weak is the horizontal development of these products because they cover a small amount of the functionality of a company. Also a lack of functional modules can be noticed which means a considerable technical support: project management, document management, SFA, CRM, SCM, enterprise portals.

The majority of products are built on Microsoft technology (.NET and SQL Server) and is addressed to the majority of mid-market enterprises.

Even if traditionally ERP represents a complete system of management and control of all resources and business fluxes, the definition of it has already been extended to the so called extended ERP or ERP II systems, to the area of CRM - Customer Relationship Management or that of SCM - Supply Chain Management, to enterprise portals, placing them into e-Business Suite. Thus, ERP becomes a complete management system of internal processes as well as managing customer relationship, customers and potential customers. As it can be seen from the above table, Romanian products have yet to go into the e Business Suite application. It can be asserted that in this respect Romanian products are still in the first generation of ERP. Another reason for this is the fact that these products have a weak incorporation of newest advanced IT, which bring benefices especially to costs and real time decision making – management and warehouse logistics, supply chain management, transport logistics, document management, workflow management, collaborative work tools, etc.

A lack that is considered to be important due to Romanias` adhesion to the EU in 2007, is that the adaptation of products to adopt the International Accounting Standards and of other standards that have become compulsory after adhesion. If up until now, this lack of Romanian products has not been felt, due to the fact that companies did not hurry to implement these standards, their implementation will become inevitable in a short period.

Conclusions

Categorically, when talking about software products for company accountancy, we cannot speak of simple applications that are ran on a computer, in which to input accounting notes from journals to result accounting registries, checking balance, annual accounts. Even thought here are still companies that use Microsoft Office as accounting application, due to tougher competition when customer satisfaction will be most important, these companies will see if they have not done so yet the competitive advantage that a performing software can offer.

For the Romanian software to last on long term, they have to look to the future more than they done so far. What is contouring more and more on the horizon is the primordial importance that information will have. From the department systems to enterprise systems and business systems by integrating partners, the tendency is for information to be transmitted further and further away. That is why, it is important to know which are the new technologies that can bear this information further away and which, in the near future, could not be ignored. Two of these technologies are Web services and XML standard (eXtensible Markup Language).

Although the used technologies in an ERP are depending mostly on its provider and on the view of the company, in the present context, any ERP system must have some characteristics.:

- an ERP system must have a modern data base, available on any platform (Windows, Linux, AIX) and which to allow communication with other applications (ODBC, TCP/IP, XML);
- to incorporate a complete set of technologies for eBusiness as external and internal e-mail, chat, VoIP telephony, online shop support;
- to include support for interconnectivity with mobile devices (laptop, PDA, smartphone);
- to include a company portal which will allow the application to be used in any point of the world via Internet;
- to be interfaced, easily configurable, to be able to sustain online processes and to allow decision making support (data storage, OLAP tools, DataMining);
- to allow communication with other systems by using XML standard (eXtensible Markup Language): to be able to create XML schemes (data specifications) and to be capable to import and export data in XML format of documents;
- to use XBRL language (eXtensible Business Reporting Language) for economic reports and universal accounting no matter the system from which the data come from or the accounting standard that produced them;
- to adopt a service oriented architecture (SOA) in order to accomplish the objective of integration of processes from the company as well as integration with any external system;

Romanias adhesion to the EU has imposed an entire series of changes of the way the business function, as well as of fiscal and accounting legislation. These changes must be assimilated as soon as possible by Romanian ERP products that want to last on the market. Let us not forget that, products from the external market come only with these standards implemented but are also tested on the market. Examples of such changes is the reversed VAT taxation for goods exchanged with EU countries, periodic reporting according to Intrastat and VIES of goods transferred in other EU countries, major modifications in the formatting and content of sales journal, purchase journal, and VAT deduction, dropping of standardized invoices, etc.

In our opinion, the increase in functionalities, soliciting more frequently web-enabled systems and emphasized delimitation of market verticals are the main tendencies that will influence the development of ERP products.

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