EVOLUTION OF ERP MARKET IN ROMANIA DURING THE CRISIS

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ABSTRACT:
The paper aims to analyze the evolution and use of integrated ERP systems on the Romanian market during the crisis. In the context of the more developed markets as in Romania like those in France, Germany and Austria but also in Poland, Czech Republic or Russia, which shows clear signs of a sustained demand for complex business solutions, ERP domestic market remains stagnant or slightly oscillates around the same values and no signs of recovery before 2014. Thus, according to PAC studies (market analysis company Pierre Audoin Consultants) in 2009, the local ERP market demand, decreased much stronger than on the entire market for software and IT services in Romania. In 2012, only 105 million euro were invested for new or the maintenance of ERP projects already implemented in previous years, proves that Romania has one of the worst appetites of Europe, reflecting the functioning of the economy and of the public sector but also of the default public administration. While in most countries in Europe, public administration accelerates adoption of ERP solutions with processes and functionalities already developed and important references, Romania still prefer to develop specific systems, sometimes around general ERP modules, without real references in the field.

Keywords: Information society, IT&C, ERP, Integrated Systems

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1. INTRODUCTION
To develop a subject so complex as that of integrated solutions, will briefly present some theoretical concepts, but also the intrinsic link between sustainable development, the information society, integrated software solutions, and role in enterprise architecture.

Information Society and Sustainable development
Information society is the society in which creation, use, integration, distribution and manipulation, production and consumption of information are the most important type of activities; information is recognized as a primary resource as well as natural resources; information and communication technologies (IT&C) are basic technologies and informational environment, together with the social and ecological - a medium of human existence [12]. Information society integrates the objectives of sustainable development in the context of the new economy based on technological products and intellectually intensive activities and a computer-based technologically advanced infrastructure, networks and communications, smart stations and integrated systems [3].

Enterprise Architecture Structure and Integration
Integration Architecture can be broadly defined as know-how of bringing data and information together and sharing it between repositories, applications, business processes, and organizations. Successful integration allows a company's entire organization to be brought into a cohesive, responsive infrastructure for making better decisions, driving the organization toward new business opportunities, and adapting to change in the marketplace [4].

Integrated Information Systems (IIS) and Enterprise Resource Planning (ERP)
Embedded Computing Systems (Integrated Information Systems) through applications of Business Intelligence (BI) provides an indispensable tool to business process management, regardless of the hierarchical level of the management. ERP system is a complex software solution, whose elements are integrated into a common platform for enterprise resource management. Current ERP systems integrate all functions performed by the management of a company, starting from Planning, ensuring Stock of raw materials, defining technologies, coordinating Production Processes and, not least, to the achievement of Accounting and Financial management, Human Resources, Stocks of finished goods, and finishing with developing and maintaining relationships with clients and business partners [5][6]. Current ERP system enables decision makers achieve complete analysis of the business plan. By using the simulation activities and through flexible and dynamic nature of the applications can be made forecasting plans, assessments and predefine the trends of the industry of which includes the company, qualitative analysis, integration with new technologies of e-business and

1 Nita Dobrota, Dictionar de economie, Ed Economica, Bucuresti,1999, pag 435
2 http://en.wikipedia.org/wiki/Information_society
3 ibdem
4 http://www.technology-training.co.uk/ introductionto enterprise architecture_30.php
6 http://www.greensoft.ro/index.php/class=terms&method=show&lang=2&gid=27
Evolution of ERP

Schematic evolution of ERP systems is as:

- 60’s - unintegrated applications for inventory (stock) control
- 70’s - MRP1 - Material Requirements Planning
- 80’s - MRP2 - Manufacturing Resources Planning
- 90’s - ERP - Enterprise Resource Planning
- 2000 - extended ERP (ERP2): Enterprise Application Integration (EAI)

ERP integration with other systems such as ECM (Enterprise Content Management - management of unstructured information) as structured information processed by ERP, represents only 20% of the information needed by business decision.

2. EVOLUTION OF ERP MARKET IN ROMANIA DURING THE CRISIS

To show the evolution of the Romanian market of integrated ERP solutions have used data and analysis from PAC (market analysis company Pierre Audoin Consultants).

The impact of the worldwide financial crisis was intensely echoed in Romania as well. Along with Russia and Poland, Romania had been viewed by many as being potentially one of the fastest-growing markets in Eastern Europe for ERP software and services. But despite growth estimates of more than 25% per year, the Romanian ERP market has only increased by 19% in 2007, which included a rise of 15.7% in software and 21.7% in implementation services. (Market analysis Pierre Audoin Consultants) 8.

In 2006-2007, the champions of growth were those companies connected to large private accounts - most of them under foreign ownership - and able to provide them with high added-value services, like OMV Petrom.

“With only €120mil. in total software and services, the ERP market in 2007, Romania was still one of the worst developed in the region, among the leading countries” (Eugen Schwab-Chesaru, Managing Director of PAC Central and Eastern Europe).

According to studies of PAC (Market analysis company Pierre Audoin Consultants) in 2009, local ERP market decreased much stronger than on the entire market for software and IT services in Romania. Based on these studies emerges a group of ERP, SAP dominated group. Regarding the market share of ERP vendors, ranking first conducted by SAP followed by Oracle, Siveco and TotalSoft.

![ERP software in 2009](image)

The total Romanian ERP market declined by 3.2 percent in 2010 and the implementation services market fell by 7.5 percent in the same period, under the impact of the ongoing crisis. (PAC analysis) 9.

In 2010, SAP maintained its leading position in ERP software (licenses and maintenance) sales, as this was again the solution preferred by one of the largest industrial groups in Romania, which decided to switch to SAP and to acquire a large package of licenses at the end of 2010. Among the local companies, TotalSoft consolidated its position as the best

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8 PAC 2008 The Romanian Software and IT Services Industry - One Year After the EU Accession, page 1
9 PAC 2011, Romanian ERP Market - Crisis not over yet, but slight recovery in sight, pag1
sold ERP system after world leaders SAP and Oracle and its licenses sales have again grown in 2010, reaching new record levels, which also gave the company a larger share of the Romanian market\textsuperscript{10}.

Of the integrators, Romsys is the only major player to have gained market share in 2010; being well positioned both in the public project market and in the field of large retail stores. Romsys seems set to follow an ascending trend in 2011 as well, far ahead of the general market evolution.

Eugen Schwab, Managing Director PAC Eastern Europe, emphasizes that “The public sector in Romania, as well as the ones in Russia and Turkey, are the least modernized, the least transparent and the most inefficient in Central and Eastern Europe. Could it be just a coincidence that precisely in these three countries the ERP type of software solutions is chaotically implemented in the public administration, via specific developments that exclude the contribution of know-how from Europe or even the USA and without an evolution of the internal processes, of the work, budgeting and control methods?”\textsuperscript{11}

In 2011, only 105 million invested for new or maintenance of ERP projects already implemented in previous years proves that Romania has one of the worst appetites of Europe, reflecting and functioning of the economy and the public sector but also and default public administration. While in most countries in Europe public administration accelerates adoption of ERP solutions with processes and functionalities already developed and important references, Romania still prefer to develop specific systems sometimes around general ERP modules without real references in the field\textsuperscript{12}.

In 2011, the results show that ERP in Romania, did not change the market leader in ERP software and services (TotalSoft) nor on the sales of licenses and related maintenance (SAP) (PAC)\textsuperscript{13}.

- Small and medium enterprises (SME) hardly find resources to finance serious ERP projects that clearly need better control of the business and increase competitiveness.
- In terms of vertical sectors with the greatest appetite for ERP solutions remain the industry (Manufacturing) and commercial (Retail & Distribution), given that 2011 was an austere year for investments in utilities.

![Fig. no 2](https://www.pac-online.com/pictures/Press/2012/Oct/PR_ERP_RO_Oct12.html)

**ERP software in 2011**

- SAP 34%
- TotalSoft 25%
- Oracle 22%
- Siveco 11%
- Microsoft 8%

*Fig. no 2. Data source: PAC 2012*

In 2012, the total market value of ERP software and services stood at 105.1 million euros, of which 46.5 million euros were software sales and the remaining 58.6 million, implementation services.

“The local market ERP is in a phase of stagnation and indecision. On the one hand, the financial crisis has affected many local businesses and generated a lot of reluctance in investments, including critical ones such as IT management tools, control and planning, on the other hand, European funding chimera created an expectation toxic of ‘aid’ hoped to implement IT solutions, especially small and medium enterprises. The cost pressure and the focus shifted almost exclusively on a budget implementations prevented a positive evolution of the local consumer maturity ERP solutions “(Eugen Schwab-Chesaru, Managing Director Eastern Europe Pierre Audoin Consultants (PAC). The most active companies in terms of implementation of ERP software solutions were the manufacturing industry, retail companies and the utilities, which together have accumulated more than 65% of the total market specific solutions. SAP Romania, a subsidiary of German manufacturer of business software continues to dominate sales of ERP (Enterprise Resource Planning) locally, with a volume of more than 10.3 million in 2012. According to the PAC study, the company had a 12% increase over the previous year.”\textsuperscript{14}

\textsuperscript{10} Ibidem
\textsuperscript{11} Ibidem
\textsuperscript{13} Ibidem 12
\textsuperscript{14} http://www.business24.ro/companii/datori/consultanti-piata-locala-de-solutii-software-erp-este-intr-o-faza-de-stagnare-si-indecizie-1537122
Conclusions

Companies in agriculture, manufacturing, services and accessing the European funds for informatization in 2014 will be the main customers of providers of enterprise resource planning solutions (ERP)15. “Distribution companies were the first beneficiaries of ERP solutions in Romania, while production companies, although they had and still have need opted to invest in developing their own production. Lately, we note the increasing number of customers in agriculture and those who use European funds. We believe this trend to manifest fully in 2014, "said Calin Vlad, general manager of Serra Software.

New ERP sales could reach 2014 value of 50 million euros, according to estimates Serra Software, while the overall market, which includes maintenance contracts, sales of modules and for new users (for existing customers) will rise at around 110 million euros, while the needs are more than ten times higher.

“Year 2014 will be a year of growth, optimistic expectations indicate a 20% from the previous year, but we are concerned about the quality of implementation and not increase sales. In the market clients tend to give the solutions <<no name >> and opt for dedicated platforms. Primary reason which obliges entrepreneurs and medium and large companies to invest in IT remains the pressure of international competition, "added Calin Vlad16.

Specialized companies analyzes did not show a spectacular evolution for years to come, but it is hoped that the vector of all public sector growth will be the only engine of growth potential with higher volumes on the project.

References

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15 Ibdem16