

## ADVANTAGES AND DISADVANTAGES OF USING INTEGRATED ERP SYSTEMS AT TRADE ENTITIES

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### Abstract

*Constant change of market conditions and fierce competition have imposed, in the framework of economic entities in general, and those in the trade, particularly finding ways as effective for obtaining certain information to capture, on a continuing basis, all relevant aspects related to internal processes and the interaction with the external environment; so, the use of information technology-based solutions in the activity of economic entities has evolved over time from option to stage the necessity. To thrive, economic entities in general, and those in the trade, specifically (in my opinion), are required to integrate applications into a powerful infrastructure, so that the entities in the trade, an integrated system is a combination of business management practices with information technology, whereby the business processes of an entity are integrated into the computer system, in order to achieve specific business objectives.*

*Enterprise systems are a critical component of the process view of organizations. They facilitate communication and coordination among different functions, and they allow easy exchange of, and access to, data across the process. More specifically enterprise systems play a vital role in the following three areas: execute the process, capture and store process data, monitor process performance.*

**Key words:** accounting information system, information, integrated systems, Enterprise Resource Planning, trade entities.

**Classification J.E.L.:** M 40, M 41

### 1. Introduction

As Reş stated modularity character is important when you want to purchase and implement an integrated ERP, so that sometimes are not needed all at the same time, or you may want to implement a single application at a time, but embedded systems differ from separate applications, meaning that if you implement at least two they fit like pieces of Lego and works automatically (Reş, 2011) [5].

### 2. Integrated ERP systems at trade entities: advantages and disadvantages

An integrated system is a modular structure, with a nucleus (SETUP), in which are defined the company own settings and a variable number of modules depending on the requirements of implementation of each entity individually.

Unintegrated applications users spend heavily endlessly repeating the same task, namely the introduction of the same data in different programs, in which case certain problems can be identified, as follows:

- rewriting the same data means waste of time;
- they are liable to be entered incorrectly;
- may look different depending on the program (e.g. the same company with two names);
- there is a possibility that the data resulting from individual applications are offline to be inconsistent, and attempts to analyze them not go than to a decision-making or chaos to a waste of resources for validating the results;
- with the help of an integrated ERP system there is only one truth, as stated and the author, who has taken over the once, to be propagated in all necessary areas of the business, and in this way, employees and business processes that use the application and managers who take decisions for entity have the same version of reality, in real time at any time.

As Adam (Adam, 2014) [1] started the implementation of ERP integrated systems is difficult and expensive, but the benefits are substantial; While citing Elizabeth Umble, the author argues that the most important benefit would be the following:

- a unified and comprehensive vision of the business, which covers all activities and data flows in the areas/departments;

- a database entity in which all transactions are recorded, processed, monitored and reported. This unified vision may charge an increased interdepartmental cooperation and careful coordination; This ensures a much better communication and a response time significantly shorter;

- a unified system of reporting to generate and analyze real-time data coming from different departments;
- the possibility of extending ERP systems with modules that provide functionality for Business Intelligence, enabling the generation of scenarios of category "what if";
- the possibility of integrating other systems existing in ERP system via interfaces API (Application Programming Interface).

Many trade entities, especially those medium-large sized, have implemented integrated ERP systems. As Hurbean (Hurbean, 2013) [4] states practice has shown that it is not so difficult to implement an integrated package of applications, how to obtain and to benefit from all the advantages that they generate; and this is due, on the one hand, the complexity of ERP systems, and on the other hand, misunderstanding principles of working at managerial level. In addition, the optimal operation of the system is only possible through harmonization with insight into the daily functional entity.

As the author said, quoting O'Leary, the potential offered by an ERP system for value creation is the most systematized through the following features:

- ERP system brings together all the activities of the entity, since the processes "crosses" more functional areas, which constrains the entity to emerge from the classical patterns of functional applications, such data are integrated into a single system;

- ERP systems promise using best practices, as they analyze more business processes and the expertise of specialists. At the same time expected success of the implementation of an ERP system is closely linked to the extent to which these practices are adopted, in order to enhance the operational level operations;

- ERP systems are an activant standardisation organisation. By implementing an integrated system all organizational components are brought to a common denominator; and this is felt most by the entities, in trade, for instance, in structure of which there are several outlets territorially dispersed. An ERP system will cause the alignment of their processes and will make it possible for the entity to provide a single image outside, overall. So, on the one hand, increases the efficiency of operational standardization, and on the other hand, retouch and refine its image outwards;

- integrated ERP systems eliminate information asymmetries, since putting all the data in a single system, the same database that powers all the applications. So that the implications of this are major features, starting with getting a more rigorous operational control, while continuing to ensure access to information for all those interested. Finally, the effects are felt among managers, who get the real-time information they need, which contributes to the improvement of the decision-making process, but also at the level of ordinary users who are in the same position, in turn, inform;

- integrated ERP system provides information anywhere (online), in real time. If in traditional systems the information circulates between the departments most often in printed form in the ERP system, it is available directly to all users who need it as soon as it was introduced in the source system, where it was generated;

- integrated ERP system offers competitive, at the same time, the same data, for planning and control;

- ERP system facilitates communication and collaboration intraorganizational;

- integrated ERP system to facilitate communication and collaboration inter-organisation.

And Grabski (Grabski, 2009) [3] also states that various, studies show that about 90% of large entities have already implemented an ERP system; Thus, in the opinion of the author of integrated ERP systems offers three major benefits as follows:

(1) automating business processes;

(2) timely access to information management;

(3) improving the supply chain through the use of E-communication and e-commerce. At the same time the author mentions and other benefits such as: improving visibility of information, decrease costs, getting the most end-of-period reports, greater market responsiveness, better control over logistics and others.

But as Păvăloaia and Hurbean (Hurbean, 2013) [4] said not all the benefits can be measured, therefore, believes that they are and I agree, it should be taken into account the **quantitative**, of which the most representative entities of the trade, I believe that they are the following:

- **stocks reducing**. Due to scheduling practices and improved programming can get a reduction in the level of stocks by 20% or even more and is reflected in the decrease in the level of inventories (where stocks have a fairly large proportion), on the one hand, and the associated level of savings to stocks, on the other hand (storage, handling, insurance, damages, etc.).

- **reducing expenditure materials**. In an ERP system, best practices are implemented and supply Department, helping to negotiate better prices and cutting costs by at least 5%. Improved planning system allows users to focus its efforts on negotiating with suppliers and raise the quality and provides useful information such as negotiation, performance graphs for providers. Also, relations with suppliers are improved in terms of visibility and communication; service providers can learn about future applications, providing increased efficiency and the ability to offer lower prices to firm orders, for example.

- **reducing labour expense.** Improved system of resource planning and support this reduction by about 10% because goods flows optimization will eliminate downtime and periods of overcrowding. The supervisors also have a clear picture of the amount of labor and can use better time in mentoring activities and personnel training, aiming at improving the quality of human resources.

-**improving sales and customer relationships.** Better coordination of sales ensures improved relations with customers. Effective management of contracts with customers, shortening of the delivery deadlines, leading to increased customer satisfaction and increased sales of at least 10%.

-**better control over accounting and claims.** By automating workflows, activities are coordinated and monitored by the system-operating times are reduced and minimized errors by introducing only once in a given system. Integrated ERP system ensures the collection of claims procedures firmer, which leads to a reduction in the number of invoices with payment term exceeded. It is possible to know in real time the flow of Treasury and its forecasting.

The same Şoavă (Şoavă, 2009) [7] considers, that streamline business of an entity may be derived from a series of advantages resulting from its implementation of an integrated system, of which the most important entities in the trade, are and I think that might be the following:

-**reduction of operational costs.** An integrated system is composed of a series of modules that are intended for the various departments within an entity, such as finance and accounting, procurement, sales, information, etc., and although it has a highly varied nature, is operated once and is accessible any module is required. Thus it saves time, resources, diminishes the probability of committing errors of operation, facilitating access to last-minute information, etc., and one of the features of an integrated system is that all the information is stored in a single database.

-**facilitates the management of current operations.** Daily decisions are taken based on the information available at a specific time using standard reports provided by an integrated information is current, consistent and intuitive present, creating prerequisites for the decision-making foundations.

-**inventory optimization.** This is due to the operational and management tools that allow you to control decision-making processes of purchasing, shipping, picking, targeting, etc.. There are also kept in check and stocks that have deadlines expire, slow rotation, etc..

-**increasing the level of fulfilment of orders.** By automating the chain controls, procurement, inventory management, warehouse management, logistics removes the vast majority of potential failures that lead to failure, or applications in the delivery of unsolicited goods.

-**improve your cashflow.** Through the implementation of coherent trade policies and by the ease with which they can get specific indicators, the entity can control more strictly monetary flows and money recovery periods, imposing financial discipline all factors involved.

-**the integration of financial information.** Being a single system, there is a single vision of results, so it eliminates the problem of "multiple truths", where each department has its own set of results, analysis and conclusions, often contradictory.

On the other hand, **non-quantifiable benefits** of an integrated ERP system can be seen from many points of view, but I think that the most important would be the benefits of cost accounting in general. Thus, with the help of a database, ERP accounts no longer requires files in duplicate and removed the repeated insertion of data. Basically, in terms of the whole entity an integrated ERP provides a solid framework for team work, materializing at the same time a consistent plan of action (Rusu, 2005) [6].

Detailed transactional activity may also be slightly improved to meet the demands of accounting. Normal accounting procedures and the closing can be made in minutes or hours instead of days or weeks. This results in the reduction of work time for accounting and financial reporting. At the same time, financial reports can be easily modified through quick configurations to meet the best requirements of decision makers.

But as also the author stated the important benefits do not come from the use of effective has an integrated ERP, but of organizational transformation induced by the implementation and realisation of opportunities created. In other words, the author would appreciate that 90% of costs or benefits are intangible assets created through investments in software, education and organizational transformations, and the value of a system is not embedded in information technology, but in how technology is used, when it becomes a means of achieving a strategy.

**Table No. 1 Advantages of integrated ERP systems**

<b>Advantage</b>	<b>Way of delivering</b>
Safe integrating and secure access to information, quality information	Database Management System (DMS), consistent and accurate data, improved reports
Standardization of business processes	Reshaping business processes by adapting the ERP systems to conform to its requirements, adoption of best practices
Automating business processes	Information sharing in real-time and transmitting them through appropriate channels
Development of enhanced managerial decision	The dissemination of timely and accurate information

Eliminating data redundancy and operations	Accesses the same data modules in the central database, the I/E multiple operations are avoided
Reducing the time of delivery	Minimizing information retrieval time and delays in reporting
Reduce of the cost	Saving time and better control through an extensive analysis of the decisions at the level of the entity
Easy adaptability	Changes in business processes are easily to be adapted and restructured
Improved scalability	Structured and modular software architecture
Easy maintenance	Maintenance contract long term supported by vendor
Extensive global services	The use of BI and CRM modules
Collaborative dimension	CRM and SCM modules, extend and open the system toward suppliers and clients
E-Commerce/E-Business	Commerce over the internet, collaborative culture

Source: processing after Adam (2014, pag. 52)

In spite of substantial advantages described above, integrated ERP systems presents some disadvantages, as follows:

**Table No. 2 Disadvantages of integrated ERP systems**

Disadvantage	Means of controlling
Substantial financial investment	Implementing an ERP system requires a substantial financial investment and use of many internal resources; the investment may exceed even 2-3 % of profit
Long periods of deployment	Full implementation of an ERP system takes between 3 and 5 years; and in a dynamic economic environment such durations are not advisable for projects
Difficult and complex implementation	Implementation can take from several months to several years; and in this period the benefit brought by the ERP system is not fully exploited
Inflexibility and vendor dependency	After installing an ERP system are difficult to change, activities and organizing entity
Rigid hierarchical organization	ERP systems assume that all information to be centrally monitored and entities to have a well-defined hierarchy
The existence of hidden costs	During the project implementation may appear unexpected expenses due to the existence of hidden costs arising mainly from customization processes
The need for expansion and further development of the system	Can be removed, but it will reduce the potential of the system, which will at some point become a commonplace of the operational system

Source: processing after Adam (2014, page 53)

Once installed and running, at trade entities, an integrated ERP system can provide the entity and supply chains a competitive advantage, which in the end will justify your investment of time and money. Thus, as Fota (Fota, 2009) [2] stated an integrated functional system is able to increase the ability of the entity to be used at maximum capacity, to schedule accurately and efficiently supply chain, reduce inventory, meet delivery dates.

ERP system, using a single database and a common software infrastructure to provide a better understanding and updated information, allows managers to make better decisions on which to have won the entire chain of supply, the system is also capable of providing real-time information and communicate the information about operational changes to members of the supply chain without delay and so users are able to share, to disclose certain information.

ERP integrated system assists the trade entities, for example, to ascertain reduce supply chain by adding visibility throughout the supply chain enabling viewing of orders so that members of the supply chain to improve purchase planning and supplies to our customers.

Regarding **the influence of an integrated ERP system to the benefit of entities** Rusu (Rusu, 2005) [6] said that it provides a *soft roadmap* of a command taken from the client, by automating the various steps along the itinerary set up to achieve it. Thus, at trade entities when an order taken from a customer enters an integrated ERP is available all information necessary to complete a given order (customer's credit, previous orders, discounts applied, due date, etc.), the information coming from all the modules integrated in the system. At the same time, staff from all departments have access to the same volume of information and you can update depending on the operations performed in each

department, and when a department finishes executing all operations steering question it is sent via the following ERP section, it will be processed.

Using this system orders will be honored in the shortest time and with as few errors, but I consider that, in order to get the best results from the integrated ERP system, it is necessary that the people inside the entity to understand and adopt the methods provided for by the system software; and if the methods do not ERP system are understood and adopted by the employees of the entity they would hesitate to use the system or will want to transform them into alternatives that seem easier to use but really this transformation makes the system more unstable and harder to maintain.

### 3. Conclusions

Fierce competitive environment, from our days, determines the economic entities, including those from trade, to identify, assimilate and exploit all the resources available to them and to enable them to optimise, reducing costs while increasing performance, reducing response time to market changes and the legal framework. Among the instruments to assist in the attainment of economic entities that they include and the assimilation of information technology solutions by incorporating them into information systems.

So, finally, we can say that in the context of an integrated information system almost all accounting operations can be generated automatically or semi-automatically, by retrieving data from the other modules of the system existing within the entity information: purchasing, sales, human resources, assets under construction, house, bank, etc.. By the way, I am and I feel that to have in a trade entity, a financial accounting information system performing it should be analyzed, designed and implemented only in conjunction with other components they interact with such as, a financial accounting information system performing it should be analyzed, designed and implemented only in conjunction with other components they interact with, namely: purchasing, sales, human resources, assets under construction, house, bank, etc., in order to avoid certain redundant inherent in other approaches.

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