

Danijela Grahovac,¹⁾
Rada Kučinar,¹⁾

¹⁾Elektroprivreda Republike
Srpske

JP «Hidroelektrane na
Trebišnjici» a.d. Trebinje

Cost management Tools as Business Intelligence Base and Continues Improvements Assumption “Big Things are Packed in Small Boxes”

Abstract: Corporate cost management is a key prerequisite for successful management, a process of guiding the enterprise from the existing to the particular, desired performance. Traditional cost management systems, based on the use of financial indicators, do not satisfy the needs of modern enterprises. Conventional cost management system is based on standard cost accounting systems information support. It provides cost reduction program, accordingly labor costs reduction methods realized as short term positive effects. Nowadays, a great number of different models have been developed. They have a more complex approach to performance analysis, using both financial and non financial indicators, grouped in a certain number of performance perspectives. The disadvantages of these modern systems can be diminished through their integration, which leads to creating new, integrated cost management systems. That we can see through integrated software packages who covering almost all aspect of corporate business management.

Key words: Cost Management, Business intelligence software, Activity Based Costing (ABC), Business intelligence, Business Decision Making

1. INTRODUCTION

Cost Management System (CMS) is set of formal methods developed for planning and control costs activities related with short term goals and long term strategies. Business entities have two main challenges: make profit in short term and stay concurrent in long term. To retrieve both of these challenges, effective CMS have to provide information to management. Now days there are two global cost management systems: traditional and modern. Modern approach is used in developed part of world, and we are still years behind it.

Very important role in definition CMS has consortium CAM-I (Computer Aided Manufacturing – International) with program CMS: Cost Management Systems. Main

projects are:

- Cost Management Standards;
- Resource Consumption Accounting;
- Activity Based Planning & Budgeting;
- Change Management;
- Performance Management and
- Target Costing.

These main research areas are changing companies ways of business management. This international organization, leads by professors from Harvard R. Kaplan and R. Cooper, developing and financing all activities for getting adequate costs information for making right business decisions.

Why we need CMS? - To describe true costs for cost objectives (product, job,

service or customer).

Why is true costs knowledge so important?

- *To identify money gainers or losers*
- *To compare different options*
- *To discover cost improvement possibilities*
- *To prepare and realize business plan*
- *To improve making strategic decisions process*

2. BUSINESS INTELLIGENCE SOFTWARE

By information from website: www.2020software.com, available software packages for costs management (different point of view), are part of Business intelligence (BI) software.

Business intelligence (BI) software (also business analytics, analytics software, business management software) provides to managers sophisticated tools for data analytics.

These information they can use to analyze their own business and for making right business decisions.

Business management software is used for collecting and analyzing data about sales, intern activities, production and so on, and everything is about business process improvement.

This software can be used as a part of Enterprise Resource Planning (ERP) or independent.

As we know, cost management is not independent function but part of global strategic management and it's implementation, so applications that is going to be described aren't for cost management only, but they are covering large percent whole business management needs.

Beside data from website mentioned above, research showed list of BI software packages that are going to be described.

1. Business Objects Software
2. SYSPRO Enterprise Software
3. *IBM Cognos 8 Business Intelligence*
4. Microsoft Dynamics GP Software
5. NetSuite Enterprise Solution - Business Intelligence & Analytics Software

2.1. BusinessObjects Enterprise Performance Management

Business Objects series provide BI software easy for using, affordable, and proven of field for small and medium organizations. Enterprise Performance Management (EPM) is one of solution for business management offered by companies Business Objects, leader on BI business user solution market, and SAP, recently joined companies. Together, these two companies offer software packages for process and business oriented professionals. This software packages makes improved, faster, and more accurate decision-making process and enables organizations to create a competitive advantage trough real-time, multi-dimensional BI and encapsulated analytics and transactional applications. Business Objects EPM solutions enable you to align resources around common plans, track and measure progress, and adapt quickly to market conditions to drive improved performance across the enterprise. [ref]

EPM software modules:

- Strategy management – sets goals, strategy mapping, measures success, and takes the action needed to improve performance from high level strategies to daily operative.
- Planning – Increase accurate planning on every level of organization, on the other side decrease planning cycles and connected costs.
- Financial consolidation – Completing financial consoliation and reporting cucle faster with bigger security in correct data.
- Profitability and cost management – Give us better pictue of real costs and profits, and then use this data to increase bottom line of business.
- Financial performance management – Make relationship between: strategy management, planning, financial consolidation and profitability trough trustful and centralized data source to gain financial advantage. Also it gives power to financial manager to act as strategic business advisor.
- Analytics – Show advantage of business analytics in context of intern processes and procedures.



Figure 1. EPM aligns and connects the entire organization so that every employee knows how daily actions impact corporate goals

(http://www.businessobjects.com/pdf/products/performance/br_performance_management.pdf)

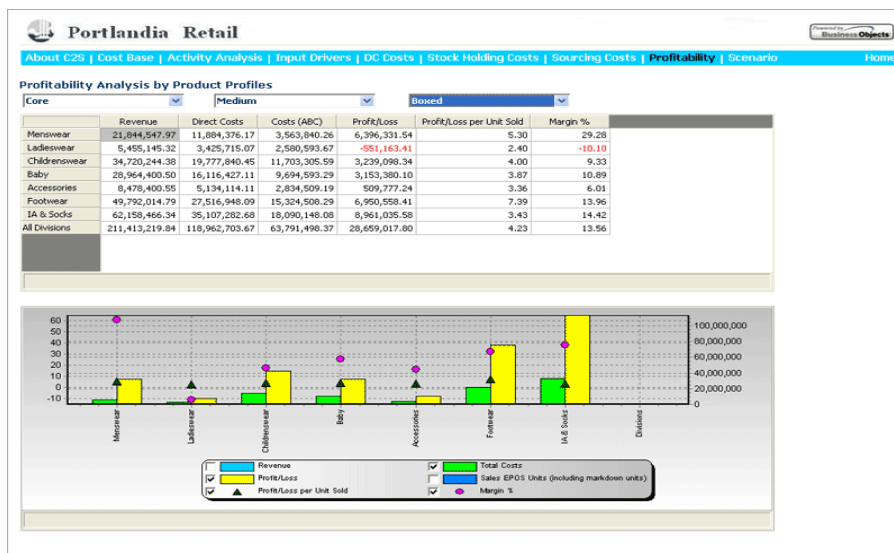


Figure 2. Cost and Profitability Analysis – ABC analysis – data about customers, products and profit channels, processes costs and costs on transaction level

Module of interest for this paperwork is Profitability and Cost Management.

Profitability and Cost Management is application based on activities. It gives root-cause analysis capabilities to performance managers with detailed description of cost objectives inside of organization. This software offers: activity-based costing method and profitability analyze; controlling of shared service costs; budgeting based on cost drivers; measure key metrics and track progress toward results. Figure 2 shows one of screens of application.

2.2. SYSPRO Enterprise Software

SYSPRO Enterprise Software for manufactures and distributors offered complete set of functions for all business management levels. This software was considered accounting software but with built-up BI module gets analytical possibility. SYSPRO meets the comprehensive information technology needs of emerging companies with a totally integrated solution that encompasses: ERP, APS(Advanced Planning Systems), CRM (Customer relationship management),

Warehouse Management and E-Commerce. SYSPRO software enables users to create multi-dimensional views of their financial and operational data to determine patterns and underlying trends, gauge performance, leverage opportunities and outmaneuver the

competition. However, SYSPRO offers most functionality as similar BI products on market.

Figure 3 illustrate one of screens of SYSPRO modules for ABC. ABC is used in this software for cost management



Figure 3. Using ABC system for cost management

There are a lot of papers standing for SYSPRO. Considering all functionality of this software it gives you impression that nothing else will be needed for life of organization. That is in case if your business is production or distribution and you have a lot of money for investment and a team of IT professionals for implementation and maintenance of this software.

2.3. IBM Cognos 8 Business Intelligence

Cognos 8 is designed by Cognos Company, Ottawa Canada. Cognos is specialized for decision support software, since 1967 and it is the biggest Canadian software producer. In November 2007 IBM bought

Cognos for 5 billions dollars.

Cognos 8 publicized on market at the end of 2005, developed from beginning with a main goal to get a BI platform for Internet. First customers were Daimler-Chrysler, Lufthansa and Alliance insurance.

Cognos 8 architecture

As we said before Cognos 8 was built for Internet, so browser is enough for access to main user functions. From there user is calling Cognos Connection Portal used to connect with Cognos Server.

Cognos 8 main functions are grouped in modules related to each other:

1. Cognos Connection – Cognos Web portal, module for publishing, managing and viewing BI contents of organization. With appropriate user

rights for access, you can activate other Cognos components, do Server administration or optimize software performance.

2. Metric Studio – User friendly interface for working with Balance Scorecards (BSC). BSC pointing on successful part of organization and on parts where needs improvement. Helps with transferring organization strategies into relatively measured goals. Also compare performance with planned values, and managers can react on right time.
3. Query Studio – Module used for getting different kind of reports, depending on queries.
4. Analysis Studio – is module for multidimensional analysis (OLAP analysis or analytic data in real time. This module has possibility to work

with big database in interactive usage. je komponenta namenjena multidimenzionalni analizi, nazvanoj još OLAP analiza ili analitička obrada podataka u realnom vremenu. U mogućnosti je da obradi velike količine podataka pri interaktivnom korišćenju.

5. Report Studio – Developing interface for making analytics or working template reports.
6. Event Studio – set of tools for reporting manager about events in organization. With it user can make agents for watching changes, actions of key customers, or any other important event in organization. When event is detected, agent will do some specific task as sending a e-mail, adding information on portal or creating report.

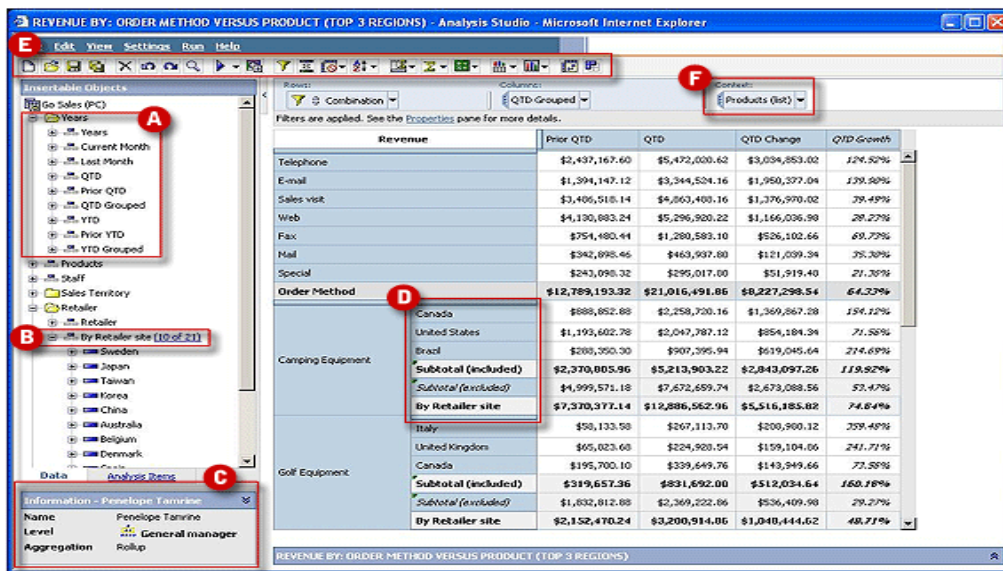


Fig 4. Analysis Studio- Cognos 8

December 2004 — Acorn Systems, the best software organization for cost and profit analysis, and Cognos, BI and CPM (corporate performance management) world lider, sing up business deal with main goal to produce complete ABC and CPM software solution. Fig 5. shows Enterprise Performance Suite (Acorn Systems) integrated in Cognos 8.

Described Cognos functionalities are core. For this paper we don't need more.

Cognos 8 integrated tools covered most of BI activities. Consulting organization Forester Consulting gave maximum mark (5) for strategy of integrating all BI functions on one platform offered in this package (Feb 2006).

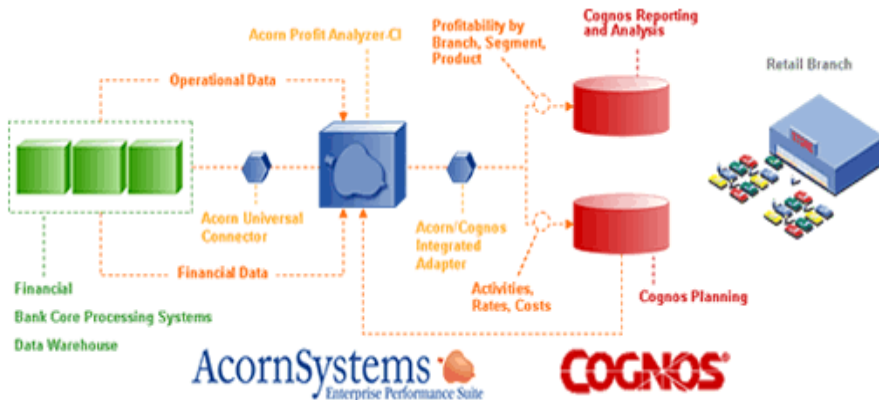


Fig 5. Integrated Acorn Profit Analyser in Cognos 8

In January 2006 Gartner did research and Cognos 8 is the best set of BI tools, and for the best implemented system was chosen system of HVB German Bank developed in Cognos tools. Cognos 8 was awarded as Product of a year in BI category and this award is something like IT Oscar.

2.4. Microsoft Dynamics Software

Microsoft Dynamics is next generation after Microsoft Business Solutions software and it is ERP software made of Microsoft Dynamics CRM-a, Microsoft Dynamics AX, Microsoft Dynamics CRM, Microsoft Dynamics GP, Microsoft Dynamics NAV, Microsoft Dynamics Point of Sale, Microsoft Dynamics Retail Management System (RMS), Microsoft Dynamics SL and Microsoft Dynamics Snap modules. The newest product is Microsoft Dynamics NAV Express. This solution is almost identical with Dynamics NAV. Only difference is the way of implementation (Express) because it is predefined solution for small organizations.

Microsoft offers integrated system based on Microsoft MySQL database, close to other Microsoft products as Microsoft Office systems and Microsoft .Net. Users on Microsoft platform can easy implement this ERP system. There are three main reasons as advantage Microsoft Dynamics: easy adoptions and scalability, acceptable price and wide specter of products for different kind of users.

MS Dynamics NAV – Business

solution for small and medium companies, covering all business processes, and it is used in about seventy organizations in Serbia.

MS Dynamics AX – for large and bigger medium companies, complete solution (for all types of business) with an accent on production management.

MS Dynamics SL – for small and medium companies, with accent on project management.

MS Dynamics GP (Great Plans) – similar to NAV, but made for USA market.

Microsoft Dynamics AX, Business solution from Microsoft Dynamics family, made for companies who are using more languages and currencies. Three level architecture makes possible that large number of users can work at a same time. Microsoft Dynamics AX 4.0, actual version, with an accent on production an e-business, offers also modules for:

- Complete business solution
- Warehouse and services processes
- Production
- Distribution
- Supply Chain Management
- Project Finance
- Financial Management
- Customer Relationship Management
- Human Resource Management - HRM
- Business Analysis Enterprise Portal, with integrated Microsoft® Windows® SharePoint® Services
- Reporting Services sa Microsoft SQL Server® 2005Web services i.NET
- Business documents exchange and basic integration with Microsoft

BizTalk Server 2006

Dynamics AX 4.0 is integrated, complex and very powerful business solution with very fast module data transfer. (<http://www.microsoft.com/scg/businesssolutions/default.aspx>)

With Microsoft Dynamics AX users can create reports based on real-time data. It support Activity-Based Costing and data analyses.

User Interface

User interface is common (Office-style), intuitive and very well organized.

User can create personalized interface and Favorites menu with the most used modules.

Master Planning

The main function of this module is to inform user what have to be realized based on planned costs budget. Master Planning subtracting costing budget and supplying budget, calculate planning costs and watch supplies, providing supply chain management. As shown in Figure 6. there are a large number of functions showing different angles of costs in Microsoft Dynamics AX.

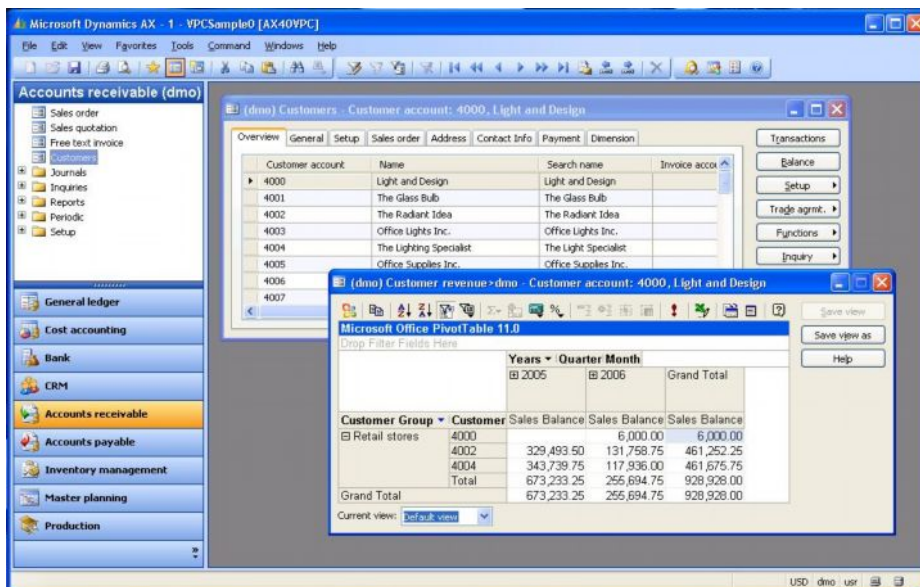


Figure 6. Analytical data processing with possibility of using OLAP Cubes u Microsoft Office Excel PivotTables. (<http://www.microsoft.com/library/media/>)

2.5. NetSuite Enterprise Solution -Business Intelligence & Analytics Software

American software company [NetSuite](#) is one of business software leaders based on SaaS (*Software as a Service*) model. Their users, now already five thousands companies, don't installing software on their servers. They are using applications over the Web with pay per month concept. Gartner forecasts that till 2011. one quarter of new BI software is going to be as SaaS. IDC estimated

that IBM, Microsoft, Google and Cisco are going to be more on SaaS market this year. Leading couple in SaaS - [Salesforce.com](#) (CRM) i [WebEx](#) (*Web meetings*, now under Cisco) – making profit over one billion dollars. (Gartner - www.gartner.com)

The main difference NetSuite software package from others is that whole BI package is offered as SaaS. NetSuite has modules for [ERP](#), [CRM](#) and *e-commerce*.

NetSuite® 2007 has access over iPhone (SuitePhone application).

Why NetSuite?

NetSuite offers similar functionality (Figure 7) as software packages described above. It can be used for small and medium companies. Difference –

this is Software on Demand is not expensive (about 100 dollars per user per month). Why is pay per month model interesting anyway? First, company doesn't have installment and maintenance costs.



Figure 7. All NetSuite functionalities

Updates are done without company's IT department. NetSuite offers self-service portals who supports B2B (Business-to-business) and B2C (Business-to-consumer) cooperation. All that means that user can be in touch with customers and associates anywhere and anytime.

In case of our companies we still have fear of broken connection...

Figure 8 illustrate one of NetSuite screens - Business Intelligence & Analytics. (http://www.netsuite.com/portal/products/netsuite/bus_dashboard_1.shtml)

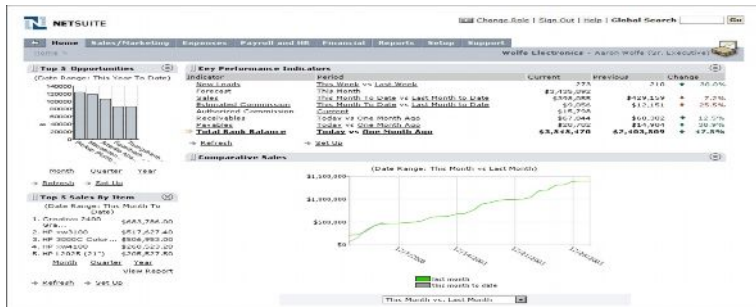


Figure 8. NetSuite- Business Intelligence & Analytics

3. COST MANAGEMENT – BASE FOR SUCCESS BUSINESS PROCESSES

After describing all software packages above, historical question is: To BI or not to BI?

In modern business information is product consumed by managers. They are using them to make right decisions. How to get right

information is a question of choice. One is for sure, beside all different types of modern BI software with sunlight speed technologies, managers don't have an excuse to be uninformed or completely surprised. Wise decision about right tool for the organization is enough.

All above described software packages and ones that are not in this paper and were subject of analyze, showing that costs

database and costs management are base for all other processes in organization. Figure 9.

illustrate costs management function as integrated part of business process.

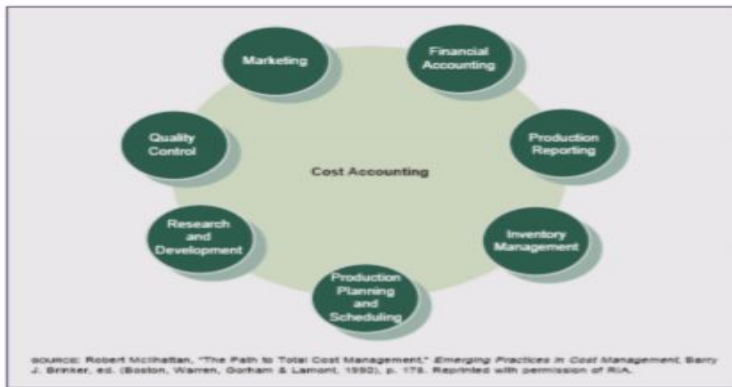


Figure 9. Integrated cost management

However, all described software packages have integrated ABC method, and with different types of data analyzes give an impression of total cost management, but the last word of decision (what to do with information) is on managers and financial experts.

4. CONCLUSION

Modern concepts of cost accounting and management are made for modern dynamic business organizations, and they are characterized with: business internationalization, global market, very fast technical-technological development, very strong competition, sophisticated customers taste, shorter product life time, and unstable economic and political situations. This kind of approach demands different types of experts to

work on planning and preparing programs for business management. Those programs are expected to be followed by all employers and at the end to give expected performances on all levels of organization. Modern IT age changed base assumptions of successful business organization, and set up new demands for performances measure and management. In modern age success of organization on market depend on their possibility to effectively activate nonmaterial resources, to make adequate changes depending on market situation, and to pleased very changeable customers needs. Main goal of this paper was to describe base elements of some BI software packages, the most used and the most popular. Above described software have bad and good sides. Modern organizations have to recognize their own needs and base on that to choose suitable BI software.

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