

## INFORMATION TECHNOLOGIES: CHALLENGE AND OPPORTUNITY FOR MODERN MANAGEMENT ACCOUNTING SYSTEMS

GEMMA HERNANDO MOLINER

Professor of Accounting

[gemma.hernando@unican.es](mailto:gemma.hernando@unican.es)

+34 942 201889

MARIA ELENA GARCIA RUIZ

Professor of Business Computer Science

[elena.garcia@unican.es](mailto:elena.garcia@unican.es)

+34 942 201891

Dpt. of Business Administration, University of Cantabria

Avda. Los Castros s/n. 39005 Santander (Spain)

Fax: 34 42 201890

### **ABSTRACT**

*After the early 90's, when much good work was carried out on the indirect impact in the area of management accounting brought about by production technological recent changes, research interest seems to have focussed on the analysis of the direct relationship between Information Technologies (IT) and Management Accounting Systems (MAS). The purpose of this paper is to analyse this relationship, as a challenge and opportunity for modern MAS in new firms.*

*For this analysis, it establishes a proposal of integrated and flexible MAS for the best placed firms in today's competitive environment. After this, it examines the advantages and disadvantages of the new technological tools available, in order to justify, finally, the most appropriate answer to the initial information system proposal.*

## **1 INTRODUCTION**

The generalised incorporation of IT has entailed a radical change in economic and social areas because of the modification of the principal factors in economic development.(from tangible resources to the intangibles of information and knowledge), the game rules (global field) and consequently, the values for social development for people and firms (rapid adaptability to the environment).

Technological revolution has been, and is, the cause and the consequence of the organisational change process in big and small enterprises, in adapting to the environmental changes and surviving in the medium and long term. As for on the latest in concerned, IT are seen as facilitating of a large number of these entrepreneurial adaptation processes.

Both, disposition of it and competence intensification that appears in the majority of economic sectors, joined the necessity to the possibility of more and best information to management and control, what it's showing in new systems development in order to take competitive advantages of good information. In this sense, MAS, as one of the most important formal information subsystem at the organisation, has assumed the challenge of adaptation to new organizational approaches through its models redesign and rethinking of tools, in order to warrant its utility as a service tool for managers.

## **2 THE INTEGRATED PROPOSAL OF MAS IN MODERN V-FORM FIRMS.**

At the globalization era, economic world has become impregnated of a integrated attitude reflecting, specially, in management area with diverse approaches: conjunction of economic and social field in the conception of the firms, difumination between short and long term in decisional processes, narrow attaching between real and financial areas and juxtaposition of human and technologic factors. And all this, it renders evident inside a flexible and virtual structure as a model for the more adapted firms to competitive environment.

This integrated and flexible attitude has been extended to the management techniques. A MAS must answer consequently: integrated posture of tools, and versatile

and coherent structuration with the new organizational modelling. This issue let us to propose the suitability of the balanced scorecard as a vertebrater model for MAS design.

## **2.1 REQUERIMENTS TO MAS IN V-FORMS FIRMS**

Some organisational factor's adaptation (strategy, structure, culture, etc.) is a consubstantial value for management accounting (MA) if it wants to become a effective service tool for the different management information needs (Contingent Theory).

With the new organizational models, it's pretended a rapid adaptation to competitive environment and customer requirements. They are named virtual or flexible organizational structures. Basic characteristics of a virtual organization are:

- a) The organization is formed as a network of information flows with capacity to create knowledge, whose structure has to respond of creative form and flexible front to the change, with capacity to use the resources and the relationships to come near to customers; taking a large importance to: individual and organizational learning, work in equipment and formation of the personnel.
- b) The organizational structure is decentralised (distribution of decisional power to the lowest levels of the line) it jeopardise with the mission and the values of the company (high management has to establish a coherent strategy that allows around her the unification of values) in order of not losing the global vision of the organization.
- c) The departmental borders of the structure are stumped by the division of the chain of traditional value chain only that happens to be a combination of chains of value with variable relations.

And, with these new developed models organizationals under the philosophy of the virtual organization, characteristic what define the configuration of enterprise the countable systems of management? In the first place, as opposed to the conception of the company like a network of information flows, we can speak of two implications for the MAS en the companies. On the one hand, the MAS will be design itself like an IS integrated within that network of flows of information, integration which it is not only possible - by the application of the IT's - but necessary in the search of an effective compaginación between technological factor and human factor that today prime in the business administration.

Also, the singular and increasing importance that acquires the valuable data in the present enterprise world is, in its capacity to generate competitive advantages like raw

material of the knowledge that resides in the organization, aspect this one that takes to emphasize the creation and control of knowledge in the strategic axis process. Consequently, the MAS will be had to conceive with a noticeable approach strategic in order to constitute itself in one of the resources nails for the economic unit competitiveness, providing information that facilitates the profit and maintenance of the same one. Under the present exposition of competitive management (management by essential competitions, direction to the client, continuous improvement of priorities quality-time-cost-flexibility) the involution of the strategist extends so much to the directive function as to the rest of functions, which takes to conceive the MAS as a system coordinated with a strategic direction and of future, that it acts in all the decisional levels and, contemplating all the excellent aspects of the management. In this sense, the challenge more recent than the measurement of the intangible resources must confront the MAS.

Secondly, as opposed to the flexible operation organization structuring, we understand that the MAS must to be a facilitator element of organizational flexibility and, consequently, flexible in itself. So that the MAS help in the organizational flexibility search has to contemplate all the activities - primary and of support that forms the company's value chain for the evaluating the costs, yields, quality and run times of each one of them, analyzing same according to the added value who represent. This type of information supports the processes of organizational reconstruction, of vertical disintegration by application of externalization mechanisms (outsourcing) and activities connection.

On the other hand, the flexible operation of a virtual organizational structure with capacity to vary the relations and the resources available, is extrapolateable to the MAS that have to adopt a structuring of the same nature to adapt quickly to the organizational circumstances money changers and, really, to continue being effective.

Thirdly, the stumping of the organizational limits by the combination of related value chains that is observed in the virtual company demands that the MAS orients to the market and acquires a global vision of the organization by complete productive processes, by means of the use of comprehensive measures of such, the evaluation of all its activities and the interdependencies cost-yield between subunits.

Finally, as opposed to the bet by the decentralization that becomes in this type of organizations, the MAS has to be considered like an element of support in the

coordination or alignment - high-priority task in the organization based on the knowledge around a common objective, of the flows of tasks made by all the workers. One of the mechanisms for the coordination is the assembly of indicators that incorporates the MAS that, from this point of view, not as much acquires importance by its content as by the location of such indicators (Roberts, 1999, p. 89). The MAS in v-form organizations had to contribute to the unification of the individual performances in the company in a same direction, being congruent with a shared vision - joint of values that defines an organization and that is transmitted to all the company and shared by all the workers and, therefore, assuming this coherence as much in its design as in his implantation.

## **2.2 COMPATIBILITY OF NEW TOOLS OF MANAGEMENT ACCOUNTING**

The succession of adaptive answers in the last arisen years in the field from the enterprise management (Total Quality, processes reengineering, management by distinguishing competitions, etc.), has been accompanied by the development of new instruments of management accounting (Quality Cost and Management System, Activity based Cost and Management systems, Target costing, etc.) that, under common conceptions to those, they assumed the variable representation of the key that in the present order of the company, is necessary to manage.

Jointly considering the new techniques of Accounting of Management, it is possible to establish advisable relations between the same ones, that show their potential compatibility; allowing, therefore, to create an integrating structure of this panoply of instruments, that as well, is apt to comply to the conditions and requirements of the present organizations. The point of starting for such integration, constitutes the new representation of the company through activities and processes, contributed by systems ABC&M, which facilitates to relate these systems to the rest of the new techniques of management accounting

In the first place, the activities based cost and management (ABC&M) systems respond to the characteristics required in the new systems of measurement and control in management accounting, inasmuch as the defined assembly of cost drivers in each one of the activities constitutes a suitable system of control and units of measurement that allow to observe, the progress that is being obtained for the sake of the continued improvement, the efficiency and the effectiveness of the new productive surroundings.

Secondly, the modern Total Quality Management (TQM) connects in the inherent philosophy to ABM systems, both techniques are oriented to the satisfaction of the customers as a center that gives sense to the existence of a product or service, reason why we will be able to accept AMB systems as a natural instrument for an effective quality cost management. TQM model takes implicit an exposition of active participation and it jeopardize of all the personnel in the continuous improvement of the competitiveness, which entails the clear definition of the functional responsibilities of each person in the organization and the restoration of a budgetary system sufficiently detailed to evaluate the results and of assigning the responsibilities on them.

The consequence of this union ABM-Quality cost management, is evident: The suitability to construct and to implant a model AMB that suitably responds to the present management of costs of the quality, providing the information necessary to obtain the continued improvement of quality and to reduce the costs associated with her. Also, the implantation of the TQM will make possible to use nofinancial variables for the measurement and control of the quality costs, including the cost of inefficient activities.

Thirdly, in relation to the strategic applicability of the ABC&M systems, some of the most excellent authors in this line of investigation, they have not doubted in recognizing the enormous advantage that the implantation of an accounting by activities supposes for the obtaining of information of strategic nature, incorporateable in the information provided by strategic accounting. The analysis and measurement of the activities, praised by the AMB, can be applied on potential future activities or, so that the impact of such actions is evaluated if they are gotten to make; having itself thus a valuable tool in the processes of reconstruction of the activities of the organization, as well as in those of design of processes and products. In effect, we can admit, in agreement with Ibarra (1993), the strategic potentiality of models ABC&M, in as much the ABC he is able to constitute a true center of I&D for the study and rationalization of activities that potentially can coexist with the present ones or eliminate them.

In fourth place, with respect to the possible complementariness between the systems ABC&M and the Target Costing, we remember that this one last one, requires of a assembly of methods to carry out the stages that its application implies. In particular, diverse procedures will have to be managed that allow: To detail the terms of the equation bases, to determine the derived costs and allowed costs or costs put of the different

elements from the product, to include/understand the excesses of cost and to detect the forms to reach the costs puts and, to establish the organizational conditions that favour the profit of the indicated results objective. For it, it's necessary the collaboration of the departments - marketing, I+D and management accounting- in order to have internal and external information on the necessities of the consumers and the market, as well as, on the causal relations of the costs of the product and their valuation. In our opinion, methodology ABC&M complies of natural form to respond to these last informative necessities on the costs, when being based on the relation of causality between factor-activity-product and allowing to the analysis of the potential activities and the calculation of its impact in case of carrying out them. Therefore, we considered that the ABC&M declares, a long capacity in this land, as much for the valuation of the costs of the new product like for the control of such in the phase of development.

### **2.3 INTEGRATING INFORMATIVE MARCO: PROPOSAL OF BS**

The consideration of the information as a factor strategic to consider in the design of the strategy next to the acceptance of which the last and definitive test of the effectiveness of the information is its utility (Paradigm of utility) demands that, so that the utility of the information is Maxima would have to be articulated in a accounting model. Such information accounting model for the managers in its different levels, allows to observe the interrelation between the variables significant and to put the emphasis in the quantitative information (ACODI, 1992).

In this sense, the tendency of the business comes being the one to extend progressively its content and to increase the number of incorporated measurements, in agreement with more and more the numerous excellent aspects for the management of the organizations. One of the instruments of strategic management accounting that it has observed this tendency is the Balanced Scorecard, whose present model we propose like the core of a wide MAS.

### **2.4 THE PRESENT PROPOSAL OF BALANCED SCORECARD (BS)**

At the early Nineties, Kaplan and Norton proposed Balanced Scorecard (BS) as a tool for communicate the multiple and coordinated objectives that companies must reach to compete on the base of their capacities and innovation and with the point of sight in intangible resources (Mallo, Kaplan et alt., 2000).

BS is an integrated system and balanced reporting system, incorporating both financial and non-financial measures associated with four interdependent perspectives - financial, customer, internal business processes, and learning and growth-, to performance measurement and strategy implementation. As such system is an assembly of elements - objective, measures, goals and initiatives- linked to a causal comprehensive of how value is created in the organization.

Kaplan and Norton (1992) attribute the qualification of "balanced" to the existing relationship between: (a) Short term objectives and long term objectives, (b) external measures (shareholders and clients) and internal measures (internal business processes and learning and growth), (c) results wished of the strategic variables and result drivers, and (d) rigid measures and other flexible and subjective measures. Also, the BS as a monitoring tool for strategy implementation, should be integrated with operational monitoring tools.

Financial perspective shows the execution of the strategy by means of financial indicators that summarize measurable economic consequences of past, indicating if the implanted strategy is contributing to improve the company image for the shareholders. The objectives of this quadrant are associated, typically, with: return on investment, the sales growth or the generation of cash flows. These indicators move away from traditional financial measures - ROI, gross margin, net result, cash- to the most recent value financial measures developed by consulting companies, such as: Economic value added (EVA), Economic Profit, (EP), Market value added (MVA) and Cash value added (CVA).

Customers perspective incorporates financial and non-financials measures summarizing performance results of different business of the company in segments of clients and markets where it's competing, to indicate if the strategy is contributing to improve the company image for the customers and, also, enabling to the managers for possible reformulations of its specific as a mean of driving future financial results. Therefore, the indicators associated to it are measured of the results of the business in the target segments, being most common: the degree of customer satisfaction, the degree of customer fidelity, the incorporation of new customers, and the market share in target segments.



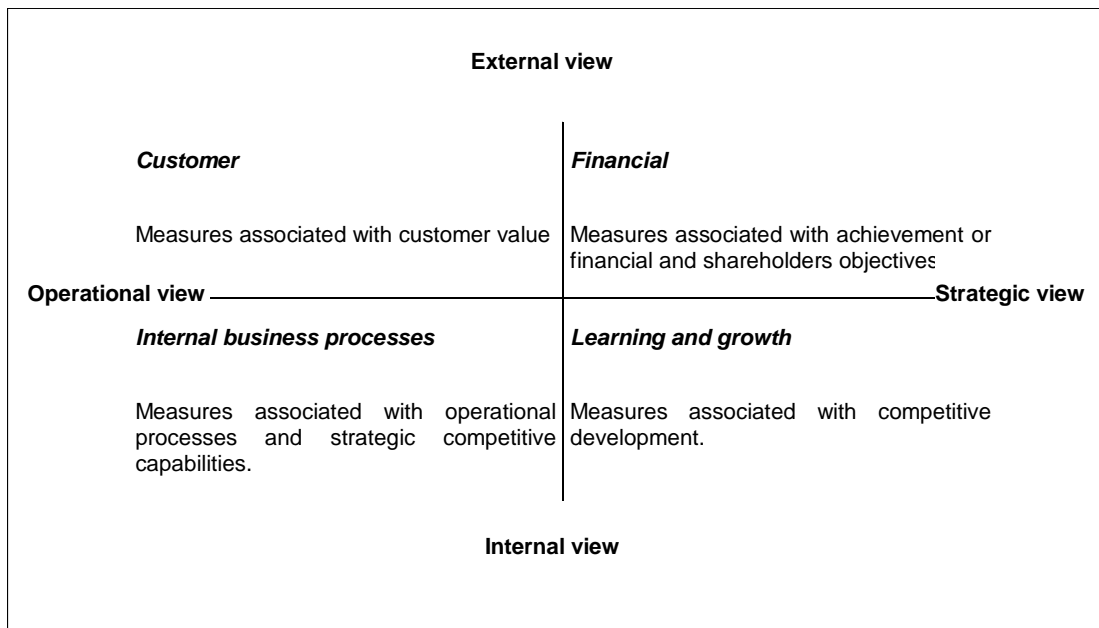


Figure 1 - The perspective of the Command cadre Integral- Kaplan and Norton (1996).

Internal processes perspective leaves from the identification of the critical processes - those that contribute to satisfy the present and future clients requirements and to generate future financial. An analysis of the complete value chain allows to identify both existing critical processes that are necessary to control and managing their continuous improvement, and new critical processes on which the managers direct their attention in order to produce better future returns.

The pursuit of critical processes identifying is made through a assembly of indicators that evaluate their execution based on the variables that in this context is necessary to manage, basically assimilated with the triangle of priorities cost-quality-time. Such evaluation implies to consider as much measures of the yield of the processes and activities like measures of the generators of this yield. In agreement with the generic sequence of the value chain, we can differentiate three groups from indicators: In the first place, the tie ones to the long term cycle of value creation (process of investigation of new demands and development of new products and services) such as the indicators of term of commercialization of new products. Secondly, the related ones to the operations of the short term cycle of value creation (process of obtaining and delivery of products and services to the present clients) such as: indicators of productivity, indicators of quality, indicators of term of execution, indicators of productive flexibility etc. Finally, the indicators related to the cycle of services postsale correspond with measures associated to

the guarantees offered to clients, the management of payments to such, a safe elimination of the wastes and by-products of the production process, etc.

Learning and growth perspective provides the necessary information to manage the development of the distinctive capacities on which to prepare the future strategy. Under the present strategic management approach, based on the Theory of the resources and capacities, the departure point is now the essential identification of the capacities (personal, technological and organizational) that the company has to develop to obtain a defensible competitive advantage, for its progress in the long term. The gap observed between the existing distinctive capacities and the necessary ones, determines the investments to make in the resources (human resources, systems and organizational procedures) for the creation of such strategic competitions. Thus, for example, investments can consider in: Update of employees, improves of the technology and computer science systems, arrangement of procedures and routines in the organization, etc.

Of this form, the indicators selected in this perspective have to allow monitoring the evolution of basic competitions of people and the progresses had in IS and procedures organizational. Like examples of indicators including in this perspective, we can mention: The level of employees satisfaction, the degree of employees fidelity, the training and qualification of the employees, the degree of opportunity of the information provided to the directive devices for the decision making, the availability in real time of critical information for the decision-action of the employees, the degree of parallelism between the incentives of the employees and the global factors of success of the organization, etc.

Really, a good designed BS incorporates, throughout the four perspectives, a assembly of cause-effect relationship between the critical variables - description of the trajectory of the strategy and a combination of two basic types of measures: those of results of the strategic variables and those of the factors that generate those results. It enables to this instrument to be used, not only for the pursuit and management of the competitive strategy of the business, but also like mechanism of communication, at all the levels of responsibility in the organization, of the objectives strategic and the average one to reach them. The comparison of the BS with the traditional proposals shows the rest of advantages of first: The incorporation of non financials indicators to the classic financial indicators, favouring that the direction of the company adopts a direction of future more

than of control of the past (Kaplan and Norton, 1992) and, prime the long term vision that on the one of the short term when locating like central axis to the strategy.

## **2.5 PROPOSE JOINT OF MANAGEMENT ACCOUNTING SYSTEM**

Under the exposed considerations, we considered advisable that in V-form firms, MAS vertebré around the economic unit strategy to define a assembly of indicators that allow their pursuit from an external point of view (shareholders and clients perspective) and from an internal point of view. This second dimension observes its entailment with first and it is possible to be developed around the defined concept of activity in ABC&M, which would allow, like we have tried to justify previously, the application integrated and co-ordinated of new MA tools. Through it, the joint of internal perspective with the functional or departmental internal perspective and of the operative units can be obtained.

## **3 POSSIBILITIES OF INFORMATION TECHNOLOGIES (IT): TO DEVELOP AN INTEGRATED AND FLEXIBLE MANAGEMENT ACCOUNTING SYSTEM**

IT are offering to present organizations great communication possibilities and data processing at a distance never before imagined. Thanks to these technological tools, the new generation organization can face, with new arms, two problems, obtain the maximum information yield and, at the same time, assure that these results arrive all the members in adapted form.

If we rely on the characteristics that define information, it is postulated that this must be appropriate in amount and quality; sufficient, exact and correct - complete -; facilitating itself at the opportune moment, in the suitable place, of simple form to the person who need it and at the smaller cost (Clifton, 1983). Task of information tools will be, to assure the quality required to information that, thanks to the new capacities in calculate capacity, speed and data processing, can make powerful analyses over the organization information. These characteristics of rapidity and power of analysis, make of IT the ideal supporting tools for BS previously commented.

Making reference to the BS we paid attention to its components (Figure 1), to assign to each one the more adapted tools in accordance with its characteristics.

The element customer requires the use of resources that contribute, on one hand, to improve the firm image in consumers' eyes through *communication tools*, and on the other hand, to depth analyse the clients' data to obtain an exhaustive knowledge of their characteristics, to discover useful tendencies for organizational planning through *information tools*. Combining both advantages of proximity and knowledge, the company will obtain synergies that will better the client service as we see next. The company presence in Internet will allow, not only, to present products and forms work, the initiatives before the potential customer solving first of the problems, but who also will serve as contact and commercialization system for goods and services thanks to e-commerce tools. In the second case, we will make use of tendencies analysis tools supported by Data Mining and Warehouse Data.

The present changing and dynamic surroundings forces organizations to pay space attention to organizational learning, through formation tools that arrive at all the organizational members, that is, computer learning systems .

Both last elements to comment - internal and financier - show common characteristics. Its assignment consists of managing its resources - as much material as financiers - to obtain the best results in order to satisfy shareholders and clients' expectatives. In its persistence, they will count on communication tools, that help to the production processes through work in group, that is to say, systems of *workflow* and collaborative work or *Groupware*.

We continued therefore analyzing the three types of commented tools - formation, information and communication - beginning with the first of them. Within the formation tools we have commented the existence of education computer systems. Concept of formation based on computer science systems, whose integration in the corporate IS allows to a permanent update of knowledge levels and qualification for the organizational human capital. Between these systems' advantages, they are the availability and flexibility, that allows distributing formation without restrictions of schedules, classrooms, personnel availability, since where a terminal exists, the possibility of receiving information exists. It is therefore, a vehicle that allows to each employee to acquire the necessary competitions, depending on the organizational necessities at the moment.

The more students make the course, the more then initial investment is amortized. Nevertheless, the trainers figure isn't replaced by theses kind of courses, but that they allow the teachers to utilize his time in other activites for improving the courses' quality.

Within *information tools* we found the standardized data warehouses and the data analysis techniques. We will begin speaking of DataWarehouse to understand its characteristics of standardized general storage for corporate data, as repositorys for later analyses and data processing made by Data Mining tools. Data Warehouse is a data system that gathers information as much commits like external, for its storage in new repository, making it accessible to any location for its operation. Thus, it is made possible that any data arrived at the organization can be acceded from any point avoiding new captures in different departments. According to Immon (1998), Data Warehouse is a collection of integrated subject-oriented databases designer to support the DSS funcion, where each unit of data is relevant to some moment in time . the data warehouse contains atomic data and lightly summarized data.. They present/display a series of characteristics that differentiate it from such summarized and which they show its direction the decision making, whereas the operational data systems take care of the capture of the data of the daily operations.

The operation of these massive repositories with operations of data analysisf is made by Data Mining tools, next commented. When great volumes of data are handled, it is very common that they hide certain information very interesting for the decisions making. Data Mining are dedicated to patterns and tendencies' search, that remain hidden between the data, starting off the base established by Data Warehouse.

The elements of Mining Data are: intelligent agents responsible to analyze information in order to detect patterns and relations of automatic and interactive form and multidimensional analysis. Between Data Mining tools it appears clustering,; association pattern discovery, sequential pattern discovery, forecasting, optimization and scoring. The techniques that support the previous tools are: mathematical models, neural networks, fuzzy logic, genetic algorithms, rules induction, expert systems, and mathematical algorithms.

We cannot forget the tools that have helped to the decision making - end of BS - precursory of present Data Mining, in concrete the decision support systems and the executives information systems (EIS). These last ones can be define as management instruments for the strategic level, based on the BS and the rate framework concepts.

Therefore, the information displayed by EIS must fulfil four characteristics: globally, relevance, consistency and opportunity. Its greater importance is in which, thanks to the technological support the processing, of the data to turn them into information requires minors resources and time, which authorizes to the direction to have the processed information, it needs and suitable for the decision making reasoned.

Between the disadvantages appears the little installation experience in such specify tools, which can be a remora of use at initial moments, the data valued and updated necessity to assure adapted results and an exhaustive knowledge of informational necessities and organizational objectives to be able to adapt the tools work ways to organizational requirements.

On the other hand, the advantages can be grouped with time in related advantages, since it is interactive tools that just a short time demand for the preparation of the data and its conversion in information; those relative to the flexibility and adaptability, by its capacities of adjustment to the business and their variations in the time; and the related ones to the yield, since they allow to make a whole type of consultations with different degrees from satisfaction according to the necessities of every moment.

Finally, with *communication tools* we can make sure that we counted with an average one to develop new forms of work in group, and to distribute the information to all the organizational member.

We will comment the *Groupware* and *workflow* concepts. First, it's defined as a assembly of applications that allows the fusion of the three concept basic for modern firms: communication, collaboration and coordination bases on the IT. The pillars on which it is based are the organization, the human resources and the technology. its synchronization are the base of Groupware operation. Therefore, a Groupware system will integrate a series of tools that assure communication capacities, between which it emphasizes electronic mail with its advantages of immediacy, digital information, saving with respect to other communication systems, coordination possibility trough group agendas, information repositories, and collaboration. On the other hand, workflow is a functional concept that allows the processes optimization through the tools Groupware provides. Its assignment consists of gliding, organizing and controlling the processes tasks to assure the best results.

The workflow installation in a company changes its ways of work reason why the cultural change becomes absolutely necessary based on the following points:

The daily tasks automatization, by means of operations list to do accompanied of the necessary information to do them; automatic finished tasks crossing towards the following ones in the process; tasks shipment to substitutes when absences exist; balanced distribution service between all the employees to avoid overloads that delay the normal process; flexibility to make projects changes and control of the activities to avoid delays in terms.

The tools that are in charge of this control are, among others, processes analysis programs, simulators, compilers and the execution support to control the finished activities and the following ones according to the business process map.

The installation of workflow in a company changes its ways of work reason why the cultural change becomes absolutely necessary based on the following points: The automatization of the tasks daily, by means of list of operations to makes (to dós) accompanied of the information necessary to do them; automatic crossing of tasks finished towards the following ones in the process; shipment of tasks to the substitutes when absences exist; balanced distribution of the service load between all the employees to avoid overloads that delay the normal process; flexibility to make changes in the projects and control of the activities to avoid delays in the terms. The tools that are in charge of this control are, among others, programs of analysis of processes, simulators, compilers and the support of execution that takes the control of the made activities and decides as he is the following one according to the map of business process.

Some of the advantages of these systems, are the personnel cost savings (dead trips and displacements, diets, times) installations cost savings (office space reduction, file space reduction, paper costs) and the management improvement with fast access to information and pursuit projects; between the disadvantages they emphasize the necessity of cultural change to work under new nonactual formulas of equipment and the elimination of the necessity of personal relation.

We cannot finalize our section on communication tools without including the last one that has revolutionized the scope of work, and the ways to make businesses. Internet, or network of networks as also she is well-known, is a assembly of networks of computers

interconnected that surpass the geographic limits, obtaining interchanges of information to global level.

Been born in the North American Department of Defence like communication network to " test of pumps ", it has been evolving from its military origins, through the academic scope, to the present time with a basically commercial direction.

The base principles are the necessity to provide communications extreme to end, is to say ,that the intelligence and the decision making about the communications establishment are outside the network, being the users the ones in charge of this control; the use of a unique protocol (TCP/IP) able independently to maintain the communication between different interconnected networks; the global connectivity. Without being exhaustive, we next commented the basic services offered by the network and the tools that allows users to accede to these services, centring our attention in the architecture that has given greater popularity to Internet, that is to say, WWW.

The basic services are: Simple Mail Transfer Protocol (SMTP) that assures electronic mail; File Transfer Protocol (FTP), that allows files transferences; and telnet or remote access.

Finally, WWW allows Internet access based on hypertext, or text capacity to contain active zones that connect with related information. The great revolution of WWW is the use of graphical applications named browsers, that show in a window the information contained in the denominated WEB pages, and that have the possibility of achieving other services supported by the network like previously commented, these tool allows users not to worry about the connection methods, doing the conection a totally transparent experience for them.

The WWW architecture is based on three aspects:

- Web servers that holds the Web pages waiting for information demands from clients,
- WEB clients who are in charge to ask for the information that wishes the user to the servers and they show in screen · to it



- communication mechanism, that is to say, the protocol HTTP (Hyper Text Transfer Protocol) and the language of creation of pages Web HTML (Hyper Text Markup Language)

Like a colophon, we included the Intranet concept, supported by WWW technology and that tries to integrate the Internet work form in the organizational informational structure transferring the Internet technologies within organizational boundaries. It's to use even internal Web servers for information distribution reducing the number of paper used for informational purposes.

Given to its versatility and globality this tool previously offers the services of many of the tools commented with some advantages on them as they are:

- universality and multiplatform of internal and external solutions through Internet/Intranet.
- solutions through Intranet allows both access to corporate systems and to Internet resources through the same technological solution.
- investment is very low since it's not based on proprietary systems
- possibilities of Intranet growth are as ample as those of Internet.
- information can be managed by the end users, they become the authentic owners of the same one.

#### **4 CONCLUSIONS**

From the relative validity that a generalist proposal can have in management accounting, in this work we have tried to justify the suitability, in a V-form organization, of integrated and flexible management accounting system (MAS),, making possible through the technological platform of a corporative Intranet. In particular, we defend that:

- 1) The characteristics elements of a V-form firm, condition their MAS for direction and management, as much in their approach as in the design configuration and functions: strategic management approach, support function in the competitiveness search

and organizational flexibility, coordination formal element, direction to the market-client, integral and flexible configuration.

2) An answer to previous exigencies will be the following one:

a) Integrating position of the new techniques of management accounting (MA) in the scope of the functional and operative direction, surroundings to the company representation by activities that a ABC/M system offers

b) Integrated Model of BS in the scope of the strategic axis that it allows to connect his internal perspective (processes and internal capacities for improvement and growth) with the integrated subsystem of countable information in the functional and operative scope, thanks to the strategic applicability of systems ABC/M.

3) The previous informative frame of the BS is compatible and possible with the technological frame of an Intranet, like integrating platform in which it has capacity the modern information, communication and formation tools that, reinforce in all their dimensions the BS approach.

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