THE EUROPEAN INSTITUTE FOR ADVANCED STUDIES IN MANAGEMENT
4TH WORKSHOP ON MANAGEMENT & ACCOUNTING IN HISTORICAL PERSPECTIVE
EIASM
Bologna, December 16-17, 2005

The role of the controller: dynamics of evolution

Stella Lippolis *

Salvatore Romanazzi**

Dipartimento di Studi Aziendali e Giusprivatistici – University of Bari
70124 Bari, Via C. Rosalba, 53
Email: stellalippolis@hotmail.com
salvatore.romanazzi@libero.it

* PhD in Economia aziendale

** PhD Student in Economia aziendale

Abstract

The evolution of information and communication technologies and changes in competitive contexts have forced enterprises to rethink managing and organisation modalities. New information infrastructures, changing the modalities through which knowledge is generated, exchanged and utilised, along with the inevitable impact on the production and consuming processes, represent an opportunity of "competitive advantage". The informative integration stemming from new information and digital technologies becomes strategic and value-creating only when the set of information obtained - more consistent as to quality and quantity – is duly mediated by the intervention of those who are in charge of the project and utilise the information models for decision making. Accordingly, the analysis means to highlight the renewed role of professional accountants and controllers in information acquisition and information management in the light of the above mentioned innovations: in the evolutionary perspective adopted, technologic "discontinuities" and changes in the competitive scenarios lay bare the mechanisms responsible for the changes in control models and in the profession of the Controller. Though aware of the specific changing processes within each specific business unit, it is possible to single out some common traits which allow the tracing of a unique evolutionary track, even though affected by "discontinuity" implicit in its intrinsic variety: the original role of the Controller, mainly based on measurement and inspection, is being substituted by the more incisive role of an "architect" and manager of the entire control system, thus reaching the present critical status of

an “interpreter”, an “economic-financial conscience” for the management as well as in support of strategy formulation.

1 – Introduction

The purpose of this paper is to examine the management accounting role, and the role of the controller in particular, in the light of epistemological as well as diachronic coordinates. The most recent literature[1] shows how a terminological uncertainty affects the identification itself of the transition between the two paradigms[2]: Fordism and post-Fordism, the former being portrayed in its rigidity (defined as mechanicistic and deterministic), the latter in its fluidity (defined as evolutionist and post-structuralist).[3] Here, the criticality of transition affects the evolution of the function of the controller, formerly a metaphor of Fordist rigidity, now a pervasive role based on the dynamics of relation and connection specific to the so-called “*communicative capitalism*”[4].

In this transition, the evolution of ICT is crucial: it is the catalyst of the changes in that it creates the conditions and supplies the means in order for them to take place. New information infrastructures, in fact, changing the modalities through which knowledge is generated, exchanged and utilised, along with the inevitable impact on the production and consuming processes, represent an opportunity of “competitive advantage”. The informative integration stemming from new information and digital technologies becomes *strategic* and *value-creating* only when the set of information obtained – more consistent as to quality and quantity – is duly mediated by the intervention of those who are in charge of the project and utilise the information models for decision making. Accordingly, the analysis highlights the renewed role of professional accountants and controllers in information acquisition and information management, in the light of the above mentioned innovations: in the evolutionary perspective adopted, *technological discontinuities* and the related transition between paradigms lay bare the

1 Rullani E. and Vicari S. (1999), Introduction: *Sistemi ed evoluzione nel management* in Rullani E. and Vicari S. (eds.), *Sistemi ed evoluzione nel management*, Etas, Milano.

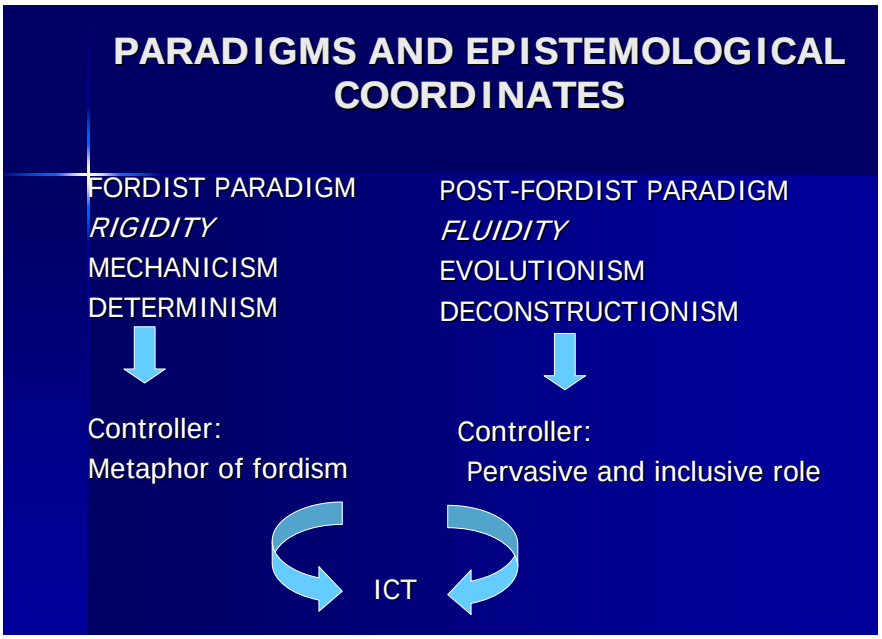
2 ‘Paradigm’ is a coherent convergence of technological solutions, communicative standards, organizational routines, cultural habits and normative institutions which progressively acquire structural stability. Fordism, for example, as a paradigm of mass production, represents not only a modality of organization of production, but an ensemble of social, political and cultural conditions. Di Bernardo B. and Rullani E. (1990), *Il management e le macchine*, Il Mulino, Bologna; Micelli S. (2000), *Imprese, reti e comunità virtuali*, Etas, Milano.

3 In the identification of the phenomenon, the doctrine often refers to categories belonging to the philosophical thought which marks the passage from the eighteenth to the nineteenth Century. Mechanicism and Determinism are associated with the wider domains of Enlightenment and neoclassicism, while Organicism and Evolutionism refer to the varied aspects of the nineteenth Century culture which ranges from the emphasis on imagination and subjectivity to Darwinism in its attempt of systematization of forms thought within natural selection. Post-structuralism connotes a complex network of movements aimed at eroding monolithic systems of thought such as Marxism ad structuralism.

4 Rullani E. (2004), *La fabbrica dell’immateriale*, Carocci, Roma.

mechanisms responsible for the changes in control models and in the profession of the "controller".

Fig.1 - The evolution of the function of the controller: paradigms and epistemological coordinates.



Though aware of the specific changing processes within each specific business unit, it is possible to single out some common traits which allow the tracing of a unique evolutionary track, even though made "discontinuous" and dynamic by its intrinsic variety: the original role of controller, mainly based on measurement and inspection, is being substituted by the more incisive role of an "architect" and manager of the entire control system, thus reaching the present critical status of an "interpreter", an "*economic-financial conscience*"[5] for the management as well as in support of strategy formulation.

Along with the evolution of the role, the controller's professional competence, knowledge and human and relational qualities evolve and are continuously updated.

2 - The transition and the role

Recent studies have emphasized the power relation which emerges in the interaction between the various roles within the 'institution'. The Foucauldian approach,[6] for example, points out the unequal 'power-knowledge' relation occurring between the roles; the publication with an

5 Brusa L. and Zamprogna L. (1999), *Pianificazione e controllo di gestione*, Etas, Milano.

6 Foucault M. (1975), *Surveiller et punir. Naissance de la prison*, Gallimard, Paris.

introduction by Michel Foucault in 1971 of Jeremy Bentham's *Panopticon* (1843), was the material of an interesting chapter of Foucault's treaty on prison entitled Panopticism. The power relation between the controller – within a prison, a mental asylum or a firm – and the controlled – a prisoner, a madman or a worker – founded a disparity of power and knowledge, which enacted the whole range of disciplines used to measure, supervise and correct the controlled. The architectural figure of this relation is the Panopticon, the tower, revisited in the managerial studies, as the 'castle', in metaphorical and organizational opposition to the 'network'.[7] The Foucauldian theory has been variously utilized as a metaphor of the state of permanent awareness and visibility of the controlled, and, therefore, of the automatic functioning of the power relation; as a means of interpretation of rules and routines at the basis of process of institutionalisation.[8] Extending the metaphor, it has come to mean a kind of *virtual panopticon*[9] of the type the Erp Systems have generated, rendering the information within enterprise and outside, visible and automatic.

Since the 1970s the *Fordist* paradigm[10] has laid bare its limits: rigidity of organisation structures and the subsequent rigidity of program and control modalities went into crisis when the complexity, turbulence and technological development thwarted all efforts to dominate an environment no longer manageable with the available resources. Monetary and energy crises were the combined triggers of a de-structuring process which has gradually taken on new variables which, in turn, have rendered the scenarios less and less predictable and the environment where enterprises act more and more complex. The variety and variability of technologies, of markets, of institutional and socio-economic contexts undermined the concept of 'stability' itself, which is usually associated to the concept of "enterprise-as-system".

Until then, the "enterprise-as-system" had been considered a stable and "complex mechanism" which needed to be directed through a rigidly top-down hierarchical organization monitored by means of exclusively economic and financial parameters. The top management, the

---

7 Miller P. and O'Leary T. (1987), Accounting and the construction of the governable person, *Accounting, Organizations and Society*, No. 12, [235-265]; Knights D. and Collinson D. (1987), Disciplining the Shopfloor: a Comparison of the Disciplinary Effects of Managerial Psychology and Financial Accounting, *Accounting, Organizations and Society*, No. 12, [457- 477].

8 Dimaggio P.J. and Powell W.W. (1983), The Iron Cage Revisited: Institutional isomorphism and Collective Rationality in Organizational Fields, *American Sociological Review*, No. 48, April, [147-160]; Seo M.G. and Creed W.E.D. (2002), Institutional contradictions, praxis and institutional change: A Dialectical Perspective, *Academy of Management Review*, No. 2, [223].

9 Orlikowski W. (1991), Integrated Information Environment or Matrix of Control? The Contradictory Implications of Information Technology, *Accounting, Management and Information Technology*, Vol. 1, No. 1, [9-42].

10 Rullani states that a paradigm is " *a theoretical assumption which is to be decoded as an 'intelligent reducer of natural and social complexity, which is selected by a cognitive filter oriented to value creation /…/ a paradigm does not prescribe behaviour, does not shape organizations, does not impose institutions, it acts on the division of*

unique responsible for the business objectives, assigned tasks and laid down the procedures to perform them. Planning was based on the idea that causes and effects were mutually determined and exactly quantifiable[11]. The traditional model of control of the *strategic planning* – in R. Anthony's view[12] – linked to a rigid conception of the enterprise implied that, after choosing the adequate policies and strategies, the control would act substantially by periodically verifying the achievement of the goals. Furthermore, there were no margins for the modification of the strategies and those who materially executed the activities were excluded from any involvement in the definition of strategies.

In such a "remote-control" model[13], which was static and suitable for hierarchically-based organizations, the role of the controller was mainly inspectional: it consisted essentially in checking the observance of a firm's procedures, the exactness of measurements and the performance of the assigned tasks by managers and workers. In this respect, the literature of the 1950s and 1960s[14] emphasised the discrepancy between the management accountants and the operational areas, which was determined by the modalities with which the control was carried out. The inspectional character of the control made the operational area perceive the management accountants in terms of power relation, as a distant bureaucracy which fuelled its own attitude of superiority through a repressive and sanctioning behaviour. Owing to the non-involvement of the operational area and workers in decision-making and its distance from the management accountants, the controller would perform a role of connector between the two opposite areas, of supervisor of the communication and information flows from the management accounting to the operational area and vice versa.

Actually, since then the doctrine[15] had already highlighted the claim that a Controller along with his role of inspector should have both the technical competence of an architect of the account system and the competence of an "educationalist" of managers and operators. As Hofstede states: "*He is in the best position to have a view of the total system and to identify its weak points, both technical and human. The technical side is his specialization anyway, but he*

---

cognitive work, that is on the division of labour which produces and experiments." Di Bernardo B. and Rullani E. (1990), *Il management e le macchine*, Il Mulino, Bologna.

[11] Laszlo E. and Laszlo C. (1994), *Business knowledge of the third kind. An introduction to the theory and practice of evolutionary management*. (It. Transl. *Navigare nella turbolenza: la direzione d'impresa del terzo tipo*, Franco Angeli, 1994).

[12] Anthony R.N. (1965), *Planning and Control Systems*, Harvard University.

[13] Beretta S. (1995, 2nd edit.), *Controllo organizzativo*, in Misurazioni d'azienda. Programmazione e controllo, Milano.

[14] Argyris, (1952) *The impact of budgets on people*, Ithaca, School of Business and Public Administration, Cornell University; Hofstede G. (1967), *The game of budget control*, Van Gorcum & Comp. N.V., Assen.

[15] Brunetti G. (1994, 10th edit.), *Il controllo di gestione in condizioni ambientali perturbate*, Franco Angeli, Milano.

could become a specialist in the human side too, which means he should educate people"[16]. Also on the basis of empirical knowledge, then, the doctrine had already caught the potentialities of the role and its relevance in affecting basic variables such as those connected with decision-making and human resources. The increasing environmental complexity resulting from the emergence of the "*out of control*" elements[17] and the related requirement for a 'de-structuring' of the Fordist enterprise to meet a renewed need for flexibility, give rise to new organizing modalities: from the 'castle' to the 'network'[18], to the model of the *diffused (extended) enterprise*, of the so-called flexible specialization[19].

The transition from the Fordist paradigm to an economic system based on flexible production and fluid organisation structures (enterprise networks) has received a crucial impulse since the 1980s, due to the evolution of information and communication technologies.

The new ICT infrastructures favoured a shift from the Fordist monolithic enterprise, whose structures were closed and stable, towards *virtual networks*[20], open to an infinite number of relations, where ICT "*loosen the constraints on the structure and development of organizations*"[21]. Specifically, the integration between information systems within the specific business unit and the sharing of information between different enterprises – made possible by the diffusion of ERP systems first, and by the ongoing convergence of such technology on a unique platform – affects the capacity of the enterprise to generate and utilise knowledge. Also, they indirectly affect the modalities of the management accounting agency, which is both the guarantor of information flows and the mediator in the "*process of transformation of information into conscious control opportunities*"[22].

The contents of the control activities, the practices utilised, the roles and the competences of the management accountants change with the advent of the informative integration although their evolution is not linear. The control models emerging in this context mark, in fact, a patent discontinuity with the past as to the use and generation of knowledge for the governance of the enterprise. The network reduces both the differences between information inside and outside the

---

16 Hofstede, G. (1967).

17 Kelly K. (1994), *Out of control*, Addison-Wesley, Redwood City.

18 Butera F. (1990), *Il castello e la rete, Impresa, organizzazioni e professioni nell'Europa degli anni'90*, Franco Angeli, Milano.

19 Piore M.J. and Sabel C.F. (1984), *The Second Industrial Divide*, Basic Books, New York

20 Vicari S., (ed.) (2001), *Economia della virtualità*, Egea, Milano.

21 Castells M. (1996), *The Rise of the Network Society*, Blackwell, Oxford; Chapman C. and Fong Chua W. (2003), *Technology-driven Integration, Automation, and Standardization of Business Processes: Implications for Accounting* in Management Accounting in the Digital Economy, edited by Bhimani A., Oxford University Press, Oxford.

22 Muserra A.L. (1999), *La nuova matrice "funzione amministrativa - flussi informativi" – implicazioni strategiche di un governo evoluto dei processi aziendali*, Giappichelli Editore, Torino.

firm and the effectiveness of traditional control modalities. Because of the urge for flexibility, all the organizational levels need to be endowed with autonomy and the skill of self-regulation as well as the acquisition and utilisation of information[23].

The tension between the urge for flexibility, on the one hand, and the need for control, on the other, becomes manifest in the development of "diffused control patterns" and in subsequent "diffused responsibility", typified by informal organisation structures, empowerment, increasing the number of subjects involved in control processes: the Controller becomes thus the link between the control knots of the structure and the coordinator of information and of self-control processes within the organisation. The progressive dissemination of such forms of control has been catalysed by the ICT, which provide the various operational units with autonomy as well as with opportunities of coordination and orientation.

As a consequence of the above mentioned changes, the Controller's professional competence and knowledge, as well as his human and relational qualities evolve, and undergo continuous up-dating: the knowledge of the business processes and specific control instruments are required along with a thorough knowledge of the working modalities distinctive of the firm business, information knowledge, communicative skills, co-ordination qualities, aptitude to work in a team, in order to support the improvement of the business dynamics.

3 - Updating of the role and empirical investigation

In the last decade there has been a substantial degree of research interest in the changing function of management accounting, carried out mainly by professional accounting bodies[24] and by academic research centres (CESAD, 1999 and 2001), whose results signal that, in spite of the persistence of different modalities through which the roles are carried out in the different business units, it is possible to highlight some macro-trends and outline evolutionary paths, which are both coherent and dynamic. This section examines more closely the evidence provided by empirical investigation - supported by a case of an updating of the role observed at Getrag S.p.A - concerning: *dismissal of routine accounting tasks, assumption of the logic of consultant and internal service, support in the definition of processes, transverse function of co-ordination, planning of the control system.*

---

23 Amigoni F., (2003), *Sistemi di misure di controllo di gestione, fabbisogni d'integrazione ed evoluzione delle tecnologie*, in Amigoni F., Miolo Vitali P. (eds.*), Misure multiple di performance*, Egea, Milano.

24 Siegel G. and Sorensen J.E. (1999), *Counting More, Counting Less Transformations in the Management Accounting Profession. The 1999 Practice Analysis of Management Accounting*, IMA; Scapens R., Burns J., Baldvinsdottir G. and Ezzamel M. (2003), *Future directions of UK Management Accounting Practice*, CIMA/Elsevier, London.

ERP systems, emerged as a solution to problems of fragmentation and incompatibility, are designed to encode management knowledge and eliminate space-time distance between the various spaces and times of acquisition and utilization of information[25]. From an institutional perspective, ERP-type technologies have been considered 'threatening'[26] for the traditional role of the accountants themselves, but they may also constitute an opportunity for the re-orientation of the role and of enlargement of their competence. The integration of management accounting procedures with the data base, the increasing possibilities of encoding knowledge, de-centring of capturing data activities, have made it possible to re-allocate, as already said, "*the management accounting intelligence*"[27] and control, re-distributing them between the operational units.

Thus a progressive process of deprivation of the codified activities of the management accountant takes place, while other possibilities for innovation of the role are within reach: first of all the increase of his organisational significance in that the horizontal integration required enhances the function of planning and coordination of the information texture and of interaction with the operational units in order to spread the technical competence finalized to the utilization of information, over all the organizational levels.

One of the effects of the implementation of integrated systems on the traditional activities of the accountant is the *progressive dismissal of routine accounting tasks*, such as capturing and elaboration of data, balancing, reconciliations, which are assumed by the integrated information system and employed also by those who have no management accounting competence. The progressive automation of the elaboration of data offers the accountant the possibility to assume activities of a more specific management character such as analysis and integration of information finalized to the support of management in its strategic decision. Hence the necessity for him to acquire more general competence and skills: knowledge of competitive and strategic variables, management modalities, operational characters, specific for the enterprise and its business, in order to act as an internal consultant, "economic-financial conscience" for the management, a role which is transverse in relation to the traditional firm's functions.

The progression of the role of the controller, *regulated by the logic of the consultant and of internal service***,** is entailed moreover within the wider phenomenon of the transition from post-fordism to knowledge economy: the development of enterprise professional systems. Within such systems actors operate, whose relation with the firm's new organization is – as Muserra states – "*very similar to that of professionals. Their remuneration relies in the transfer of competence and*

---

25 Amigoni F. (1998), in Amigoni F. and Beretta S. (eds.), *Information technology e creazione di valore. Analisi del fenomeno SAP*, Egea, Milano.

26 Chapman C. and Fong Chua W. (2003).

27 Caglio A. (2001), *Professionalità amministrativa*, in Agliati M., Caglio A., Meloni G. and Miroglio F., *L'evoluzione della funzione amministrativa*, Egea, Milano.

opportunity for self-improvement whereas their performance is required to be wider than mere specialist competence and is inclusive of professional loyalty".[28] The controller is then assimilated to enterprise professional figures, bearers of 'intelligence', ' risk propensity', attitude towards 'self-investment'.

A further element contributing to a re-focusing of the governance modality and re-arrangement of management accounting bodies – "*an inalienable pre-requisite for the exploitation of the integration potential*"[29], implicit in the new technologies – is the management and organisational approach by processes, where the value creation depends on the efficacy and effectiveness of inter-functional processes. In this perspective the controller should support those in charge of organisation, in the definition of relevant aspects for the firm's activity and of the re-modulation of information flows and of the most suitable control tools.

That function of *support to the re-reading of organisation* implies the accountant's thorough knowledge of the internal activities and competence in indicating the information priorities connected to the selected processes and the inter-connections between processes, information systems and organisational choices[30]. He must also perform the pedagogic function of educationalist for the use of information in the new perspective of organisation by processes.

The transverse character of the new role implies the need for the controller to communicate with all the organisational units, to operate within inter-functional teams, acting also as interface with operative offices. He should therefore be endowed with skills in team working as well as being highly skilled as a communicator and listener.

The traditional function of the controller as *guarantor of management and of utilization of information* both remains and evolves. He remains the pivot of the control system contributing to its planning and implementation. ICT knowledge is, as we have seen, essential for the management of the integrated accounting and for the exploitation of all the potentialities; the integration of information rendered possible by ICT is transformed into knowledge (cognitive) integration through the professional action of the controller.

---

[28] Muserra A.L. (2004), *Economia Aziendale e sviluppo professionale*, Cacucci, Bari.

[29] Polo A. and Beretta S. (2002), Sistemi Erp e Change Management, *Sviluppo e Organizzazione*, No. 194, Novembre/Dicembre.

[30] Ampollini C. and Samaja M. (1996), *Come innovare il sistema di controllo di gestione*, Franco Angeli, Milano.

4 - A Case of Updating: The Role of the Controller in GETRAG S.p.A.,[31] Modugno (Bari, Italy)[32].

From an organisational point of view, management control in "GETRAG S.p.A." is an autonomously identified function, included in the wider Administration, Finance and Control Office. Furthermore, the same Office is responsible for the integration of the function for controlling throughout all the Company. It is also responsible for relations with the Controlling Group, since Getrag S.p.A. is part of a multinational Group.

The function is internally composed of 4 people dealing with:

- budgeting and forecast;
- reporting and analysis of variances and deviations;
- industrial accounting and cost centers accounting;
- accounting for the Direction by a balance scorecard system;
- monitoring and analysis of business economic variables;
- strategic planning and analysis of new businesses.

As part of a multinational Group, the action of the Controller mostly (about 70% in the opinion of Getrag's Controllers) depends on controlling procedures set by the Holding. In fact, it would not be reasonable to think of Getrag either acting independently of Group procedures or ignoring the needs of the Company that, on the contrary, impose the setting of control instruments not linked to the Group. Thus, the Controller has also to balance his action between the needs expressed by his Holding and by the Company in which he works[33]. Moreover, he has frequent and complex relationships with the Board of the Company, also thanks to considerable development that the Company and Group has experienced in the culture of the function; this has increasingly highlighted the role of the Controller even in relation to the developments and the legitimacy that the function has achieved at general level.

---

31 GETRAG (http://www.en.getrag.de/2/2) is one of the world's leading manufacturers of powertrain technology. Founded in Ludwigsburg, Germany in 1935, the Company has developed from a traditional, family-owned business into a successful, international group of companies.
Since 1935 when GETRAG was founded in Ludwigsburg by Hermann Hagenmeyer, its corporate culture has been characterized by a strong vision: the constant striving to be better and better: better in terms of innovative products, better with regard to the constructive interaction of associates, customers and suppliers, and better in the sense of a balanced relationship between ecology and economy. In 1990, this vision was summarized with the following words: "We Do It Better". This vision is the standard for Getrag's work and is actively carried out by every associate.
During the last few years, with a workforce of 9,200 at 16 locations within Europe, the USA and Asia, the Company has achieved continuous growth and established an innovative, customer oriented product range.

32 This has been written with the help of interviews of Mr. Ferdinando Perone (Director of Finance, Control and Administration) and Mr. Vincenzo Pennacchia (Member of the Control Team) of GETRAG s.p.a. in Modugno (BA).

This administrative figure has by now assumed a role the peculiarity and importance of which consists in its transversality in comparison to other Company functions[34]. Such a characteristic is highly developed in Getrag but can reasonably be considered the basis of success of the function at a general level. The continuously increasing request for specialized professionals in the job market highlights the acknowledgment of a strategic role played by this professional, also in smaller sized companies.

For the Controller, it is necessary to analyse the budgeting phase (planning, motivating human resources, etc.). This is a fundamental step in the Controller's activity, since the budget sets out the basis that will allow the successive monitoring of activities. The budget is the term to which the final results achieved can be successively compared and the possible deviations analysed.

Some years ago, at the beginning of a career in Getrag a Controller was guided in his work by textbooks in which the importance of the budget as a working tool for this administrative figure was emphasized. Nowadays, after several years of experience and development of the role in the company, it seems to be possible to state that the budget, that fundamentally sets a series of objectives, either directly or indirectly connected to the pursuit of an economic result, has a fundamental importance for the company and its development. It is the main instrument available to the company to look to and prepare for the future.

The work of the Controller is not just finalized to the Company's internal purposes. The professional also has to satisfy the information (and control) needs of the multinational Group of which the Company is part or, as frequently happens, to answer the requests and follow the Holding's directives. A Group logic exists that represents the guidelines for the action of the Company. According to such guidelines, Getrag has a certain discretion while adopting strategic decisions.

Another remarkable part of the work of the Controller in Getrag is undoubtedly the production of reports. The reporting system is quite complex, even more by taking into account that besides reporting to the Company, it is necessary to draw up reports for the Group, and that this is usually standard for all the companies of the Group. Such information flow is used by the Holding either to compare the controlled companies or to re-orientate the Group strategy.

From a temporal point of view, it is possible to consider weekly reporting (production), monthly, quarterly, annual, multi-year. Of fundamental support to the production of reports is undoubtedly the computerised system.

---

33 Travaglini Sabbatini (2002), Il ruolo del controller nei gruppi multinazionali, *Amministrazione e Finanza*, No. 23.
34 Ostinelli C. (2000), L'evoluzione nella professione di controller aziendale, *Budget*, No. 21.

Getrag has implemented innovative control systems that have also had a considerable impact on the control modalities as a whole. Undoubtedly the balance scorecard has represented an important change in this company, and even more for the control professionals. However, it is necessary to underline that, even according to the Getrag general business culture, and despite the instruments adopted, the people are widely considered as fundamental in order to reach a real competitive advantage. The way the instruments are used, the importance of data that are communicated to the various functions of the Company, the awareness of the necessity of a monitoring function of the economic results of all the Company divisions, that originates from a real education for correct resource managing carried out by the Controller, are the basis of success of the activity of the control professionals in the Company.

Since 1998 the SAP R/3, version 4.6 computerised system has been used in Getrag as a support system to the Controller. It allows the professionals of this function of the Company to control about 90% of all the Company's flow. Such a percentage is the result of a considerable effort carried out in the last years in order to implement and improve the entire system. In fact, this system is organized by modules and, by a complex managing of the various flows, permits an overview of all the Company through the monitoring of results that the various divisions originate.

The introduction of an Integrated Computerised System has shown its effects on the Company's processes by leading, sometimes, even to organizational changes. The computerised system although moulded on the existing organization and processes in the Company since its foundation, has sometimes made some revisions either of processes or organizational concerns necessary. In the future, by the further evolution of the Integrated Computerised System, it can not be excluded that other changes will be necessary, since it is widely considered a fundamental variable with strategic importance for the future.

However, the figure of the Controller in itself has been, and constantly is, actively involved in the implementation of the Integrated Computerised System of the Company. Nevertheless, the role of the Controller is a support for all the Company's dynamics. Moreover, it is widely accepted that any event concerning the Company's action has its own relevance from an accounting point of view. All that is "moving" in the Company has to be monitored by the Controller, even by involving this professional in the decision making process.

However, the introduction of an Integrated Computerised System has contributed to the change of the role of the Controller. In fact, it seems possible that the computerised system has been evolving in step with the Controller, since they run parallel to one another. The integration

of the system procedures in the institutional ones of the function of the Controller permit them to be mutually determined and consequential.[35]

In the light of the above, the role of the Controller in general is in rapid and continuous evolution. Getrag is not an exception. There is no doubt that the character of transversality of the function allows access to a series of information and to deal with a multitude of problems that in the past were exclusively prerogatives of other functions of the Company. By being directly involved in concerns not strictly linked to accounting, professional enrichment originates that identifies the peculiarities of the actual professional.[36] The "new" Controller in a modern Company is an administrative figure and at the same time one with[37]:

- accounting skills (in the traditional sense);
- managing skills of the business;
- a complete view of the processes;
- capability to lead even complex transversal projects;
- information technology, organizational and relational skills.

The role of the Controller changes depending on the particular historical phase that the Company is living. The crisis, as an example, is one of the phases during which the Controller activity suddenly seems to gain greater importance. The function gains crucial importance and the output of his work (reports, trend forecasting, etc.) is highly considered in the decision making process.

However, the role of the Controller, in addition to the enrichment of particular skills, is turning into a further specialization. It is becoming an even more complex function and it is not difficult to imagine that in the near future it will be further enriched with new skills and capabilities, even in order to satisfy the new needs of the market in which the Company operates or, depending on the type of Company, on the dimension, on its composition and articulation, on the sector, on the internal organization, on the business culture about management and accounting concerns. The further specialisation of the role will lead to the definition of new figures, each one with its own specific skills and capabilities, even if in the Company's control system:

- production Controller;
- financial Controller;

---

35 Castellano N. (2003), *Controllo di gestione ed informazioni – Un approccio integrato*, Giuffrè, Milano.

36 Burns J. and Vaivio J. (2001), Management Accounting Change, *Management Accounting Research*, No. 12.

37 Xydias-Lobo M., Tilt C. and Forsaith D. (2004), The future of Management Accounting, a South Australian Perspective, *Jamar*, Vol. 2, No. 1.

- sales Controller;
- business unit Controller;
- project Controller;
- job order Controller;
- Group Controller;
- etc.

It seems clear that skills and capabilities requested of the Controller are evolving in step with the changing situations of company development. However, the dynamics of a company, or of markets in which it operates, or concerning the product or service sold in the market, force the Controller to follow and supervise all concerns related to such dynamics (start-up phase of the company, product development, crisis, reorganization, re-conversion, etc.).

5. Concluding remarks.

In the light of what has been said so far, the characteristics of '*architect*' of the information system and of '*educationalist*' of managers and operational staff, which the literature of the 1960s had attributed to the controller, acquire a wider significance and a professional dimension which is both more marked and inclusive.

Such an 'additive' function of the role is the result of a continuous tension between tradition and innovation. That allows us to outline a varied map of possibilities converging in a perspective confirmed by both theoretical investigation and empirical evidence.

The sharing of information, the interaction and the elimination of space-time limits in the transfer of knowledge, which the so-called digital revolution has made possible, are bound to render the firms boundaries more and more mobile and its organisation structures more and more fluid. A new virtual environment is superimposing itself over the present social and economic context, one which allows interaction between individuals and organisations, thus increasing the dissemination of knowledge. In this new context, the role of the *controller/internal consultant* will progressively take on the features of *connector* and *mediator of knowledge*, a hybrid[38] professional figure, endowed with plural competence and able to catch the "*secrets of the diffused enterprise*".[39]

---

38 Burns J. and Scapens R. (2000), The changing nature of management accountants and the emergence of 'hybrid' accountants, *Financial and Management Accounting*, November.

39 Rullani E. (2004), *La fabbrica dell'immateriale*, Carocci, Roma.

References

Amigoni F. (2003), *Sistemi di misure di controllo di gestione, fabbisogni d'integrazione ed evoluzione delle tecnologie*, in Amigoni F. and Miolo Vitali P. (eds.*), Misure multiple di performance*, Egea, Milano.

Amigoni F. (1998), in Amigoni F. and Beretta S. (eds.), *Information technology e creazione di valore. Analisi del fenomeno SAP*, Egea, Milano.

Ampollini C. and Samaja M. (1996), *Come innovare il sistema di controllo di gestione*, Franco Angeli, Milano.

Anthony R.N. (1965), *Planning and Control Systems*, Harvard University.

Argyris C. (1952), *The impact of budgets on people*, Ithaca, School of Business and Public Administration, Cornell University.

Beretta S. (1995, 2nd edit.), *Controllo organizzativo*, in Misurazioni d'azienda. Programmazione e controllo, Milano.

Brunetti G. (1994, 10th edit.), *Il controllo di gestione in condizioni ambientali perturbate*, Franco Angeli, Milano.

Brusa L. and Zamprogna L. (1999), *Pianificazione e controllo di gestione*, Etas, Milano.

Burns J. and Scapens R. (2000), The changing nature of management accountants and the emergence of 'hybrid' accountants, *Financial and Management Accounting*, November.

Burns J. and Vaivio J. (2001), Management Accounting Change, *Management Accounting Research*, No. 12.

Butera F. (1990), *Il castello e la rete, Impresa, organizzazioni e professioni nell'Europa degli anni'90*, Franco Angeli, Milano.

Caglio A. (2001), *Professionalità amministrativa*, in Agliati M., Caglio A., Meloni G. and Miroglio F., *L'evoluzione della funzione amministrativa*, Egea, Milano.

Castellano N. (2003), *Controllo di gestione ed informazioni – Un approccio integrato*, Giuffrè, Milano.

Castells M. (1996), *The Rise of the Network Society*, Blackwell, Oxford.

Chapman C. and Fong Chua W. (2003), *Technology-driven Integration, Automation, and Standardization of Business Processes: Implications for Accounting* in Management Accounting in the Digital Economy, edited by Bhimani A., Oxford University Press, Oxford.

Di Bernardo B. and Rullani E. (1990), *Il management e le macchine*, Il Mulino, Bologna.

Dimaggio P.J. and Powell W.W. (1983), The Iron Cage Revisited: Institutional isomorphism and Collective Rationality in Organizational Fields, *American Sociological Review*, No. 48, April, [147-160.]

Foucault M. (1975), *Surveiller et punir. Naissance de la prison*, Gallimard, Paris.

Hofstede G. (1967), *The game of budget control*, Van Gorcum & Comp. N.V., Assen.

Kelly K. (1994), *Out of control*, Addison-Wesley, Redwood City.

Knights D. and Collinson D. (1987), Disciplining the Shopfloor: a Comparison of the Disciplinary Effects of Managerial Psychology and Financial Accounting, *Accounting, Organizations and Society*, No. 12, [457-477].

Laszlo E. and Laszlo C. (1994), *Business knowledge of the third kind. An introduction to the theory and practice of evolutionary management*. (It. Transl. *Navigare nella turbolenza: la direzione d'impresa del terzo tipo*, Franco Angeli, 1994).

Micelli S. (2000), *Imprese, reti e comunità virtuali*, Etas, Milano.

Miller P. and O'Leary T. (1987), Accounting and the construction of the governable person, *Accounting, Organizations and Society*, No. 12, [235-265].

Muserra A.L. (1999), *La nuova matrice "funzione amministrativa - flussi informativi" – implicazioni strategiche di un governo evoluto dei processi aziendali*, Giappichelli Editore, Torino.

Muserra A.L. (2004), *Economia Aziendale e sviluppo professionale*, Cacucci, Bari.

Orlikowski W. (1991), Integrated Information Environment or Matrix of Control? The Contradictory Implications of Information Technology, *Accounting, Management and Information Technology*, Vol. 1, No.1, [9-42].

Ostinelli C. (2000), L'evoluzione nella professione di controller aziendale, *Budget* , No. 21.

Piore M.J. and Sabel C.F. (1984), *The Second Industrial Divide*, Basic Books, New York.

Polo A. and Beretta S. (2002), Sistemi Erp e Change Management, *Sviluppo e Organizzazione*, No. 194, Novembre/Dicembre.

Rullani E. (1998), in Rullani E., Romano L. (eds.) *Il Postfordismo. Idee per il capitalismo prossimo venturo*, Etas, Milano.

Rullani E. and Vicari S. (1999), Introduzione: *Sistemi ed evoluzione nel management* in Rullani E. and Vicari S. (eds.), *Sistemi ed evoluzione nel management*, Etas, Milano.

Rullani E. (2004), *La fabbrica dell'immateriale*, Carocci, Roma.

Scapens R., Burns J., Baldvinsdottir G. and Ezzamel M. (2003), *Future directions of UK Management Accounting Practice*, CIMA/Elsevier, London.

Seo M.G. and Creed W.E.D. (2002), Institutional contradictions, praxis and institutional change: A Dialectical Perspective, *Academy of Management Review*, No. 2, [223].

Siegel G. and Sorensen J.E. (1999), *Counting More, Counting Less Transformations in the Management Accounting Profession. The 1999 Practice Analysis of Management Accounting*, IMA.

Travaglini Sabbatini (2002), Il ruolo del controller nei gruppi multinazionali, *Amministrazione e Finanza*, No. 23.

Vicari S. (ed.) (2001), *Economia della virtualità*, Egea, Milano.

Xydias-Lobo M., Tilt C. and Forsaith D. (2004), The future of Management Accounting, a South Australian Perspective, *Jamar*, Vol.2, No. 1.