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Impact of Information Systems on the Performance from an Alignment Approach: Conceptual Research Model

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Abstract:
Numerous works of research were carried on study of investments impact in information technologies (IT), concerning enterprises performance. The most interesting results suggest that it is not the importance of the investments in IT themselves who have a real impact on the performance but rather their adequation with the strategy and the firm structure. The works of Iivari (1992) and Henderson and Venkatraman (1993) have opened the way to several researches allowing to determine the impact of IT on the performance of firms by using the approaches based on the contingencies models in strategic management and in the organization theory. Those searchers suggest that the development of firm strategy and its information system must be coherent. They base on the notion of strategic alignment.
In that perspective, that research proposes to try answering at the managerial concern on studying the training process of the firm performance linked to establishment of information systems (IS). More precisely, it concerns the fact of analyzing the links and the mechanisms of influence of explanatory variables of the firm performance linked to IS. By that fact, we adopt the contingency perspective to study the link between, at the one hand, the alignment of IS at strategic level (coherence on strategic choices), organizational level (coherence into organization conception) and technological level (coherence into use of technologies), in the other hand, the firm performance linked to IS. It occurs then to observe the links existing between the alignment dimensions to better understand the mechanisms of performance training and that by a proposal of a conceptual framework in the goal of supplying a theorical solid built to conduct empirical investigation works.

Keywords: Strategic alignment, organisational alignment, technological alignment, performance, information system, contingency theory.

1. Introduction

The firm searches to create the value by implementing – inter alia – information systems which generate tangible and intangible gains. For it, they do not cease to invest into the information systems for improving their performance and to generate also results. So the leaders ask themselves on the relevance and effectiveness of those investments because of the financial burden which they represent and of the risk that the firm runs in case of failure namely in an environment characterized by the globalization and the virtuality, and therefore each firm needs an information systems (IS) flexible and adaptable for supporting their strategy and their job process, also to facilitate the adaptation of organization to environment requirements.

Indeed, the dynamic adaptations of IS derived from changes of strategy or the environment belong to the problems treated by the alignment of IS. The contributions to alignment of IS such (Papazoglou and Van Den Heuvel, 2000; Scheer and Nuttgens, 2000; Wegmann, 2003 and Longépe, 2002) focus, mainly, to strategic alignment – inside – to organization. It exists when the IS in coherence with the strategical targets and the organization activities (McKeen and Smith, 2003).

The works of Iivari (1992) and Henderson &Venkatraman (1993) have opened the way to lots of researches allowing to determine the impact of IT on the firm's performance using the approaches based on the contingency models into strategical management and into the organization theory. Those searchers propose that the development of the firm strategy and its information system must be coherent. They base on the notion of strategic alignment or of congruence (« fit ») between the IT and their outside context (environment) and inside (strategy, structure) of adaptation.

The importance of that strategic alignment was announced in (Porter, 1987, and Ciborra, 1997). The work of Croteau and Bergeron (2001) has, meanwhile, showed that it can be a main factor in an organization performance. Among the researches about strategic alignment, we are particularly interested to the Strategic Alignment Model (SAM) of Henderson and Venkatraman (1999) because it supplies some instructions structuring areas to align also different alignment sequences in the form of four alignment perspectives.

Moreover, Sabherwal, Hirschheim and Goles (2001) then Jouirou & Kalika (2004) have conducted a study on the fit on a dynamic point of view: the business strategy, the organizational structure, the IT and the IT structure.

In that way, the fit question between an organization and its strategy, structure, process, the technology and the environment has served as a corner stone for the building the theory and the research in the strategic management.

Many conceptualizations different from the fit can be found in the literature (Miles & Snow, 1984; Drazin & Van de Ven, 1985; Venkantraman, 1989; Miller, 1991).

Indeed, it is advisable to remind that numerous researches focus on the link between IT alignment and the enterprise performance. However, there are few works studying the links existing between different alignment shapes and the performance.

Into the literature relative to IS, several dimensions of alignment are Highlighted: strategic, structural and technological. Even though most of attention is accorded to strategic alignment, by the same time organizational alignment and technological alignment may have a determining influence on the performance. Joining this framework, that work of research focusses on the concept of alignment like a determinant of the performance and tempts answering to the following problem: What is the impact of strategic, organizational and technological alignment of IS on the performance?

2. The Trilogy, Information Systems, Alignment and Performance: Literature Review

2.1. What Is the Information Systems Alignment?

Technically, an information system defines itself as an organized set of resources (material, software, staff, data, procedures…) allowing to acquire, to treat, to stock, to communicate information (under shape of data, texts, images…) into the organizations (Reix, 2004). Into the same perspective, Laudon and Laudon (2006) argue that the information system is a set of components interlinked which gather the information, treat it, stock it and broadcast it to help to right decision, to coordination and to control into an organization.

Reix and Rowe (2002) proposed a definition which affirms at the same time human and social essence of IS, overpassing the management sciences: « An information system is a set of social actors who memorize and transform representations via the information technologies and the operational modes ». Such a description, reflecting the social dimension (missing into previously named definitions), seems adapted rather to management sciences than to human and social sciences, and so more universal than other definitions.

Before going more forward into this sheet of paper, it must be noted here that the expressions « information systems » (IS) and « information technologies » (IT), or else « computing systems », which are commonly used through business world, make often to confusion into searchers community in information systems. Concerning Reix and Rowe (2002), the IT support IS and particularly an informational architecture, but they are not IS (Reix and Rowe, 2002). Thus, Laudon and Laudon (2006) add that the IT are the components of technical nature that the firms buy, develop or combine for constituting the technological infrastructure which will allow to their IS to function. On the study plan of firm's computerization, the IS notion is so inclusive facing to that of IT (Laudon and Laudon, 2006).

Since a long while, numerous theoretical developments on alignment of information system are abundant, affirming that the subjects treating globally the efficiency of information system which constitute a major concern rather for theoreticians, than for practitioners and the enterprises.

Authors	Alignment définition
Miles and Snow (1984)	Those authors define the « fit » as a dynamic research which aims to align the organization with its environment and to set by inside way the resources for supporting that alignment.
Iivari (1992)	That work insists that the fact of the conception object, for example the organization structure or its information systems (IS), should correspond to its context to be effectiveness.
Venkatraman (1993)	For that author, the alignment is a continual process of adaptation and change between the enterprise strategy, the computing infrastructure strategy, commercial infrastructure and the IT.
Reich and Benbasat (1996)	Those authors define the alignment as the degree with which the mission, the goals and the contained plans into the competitive strategy are shared and supported by the Its strategy.
Ciborra (1997)	That author underlines that the economic performance of organization can improve by the alignment, on finding the good adjustment between the outside positioning of the organization and its inside dispositions.
Raymond and Bergeron (1995)	Their study insists on the IT congruence with strategy, the structure and the environmental uncertainty which can have a determining influence on the enterprise performance.
Chan (2002)	Concerning that author, the alignment is a dynamic process involving the manoeurvres of continual realignments.
CIGREF (2002)	The authors of that report focus on the coherence between the business domain and ITs domain.
Kefi and Kalika (2003)	Those authors see in the alignment an emergent concept of covariation between a type of activities or strategic choices (enterprise strategy) and a particular technological deployment (IT strategy).
Campbell and al (2005)	The alignment is seen by those authors as the joining action between the « business » and the « IS » for reaching a common target.
Etien (2006)	That author defines the alignment as a set of links existing between elements of process model of the enterprise and elements of support computing system.
Fimbell (2007)	The alignment supposes the existence of strategic trajectory of reference allowing to identify the offset with that reference and to work to reduce or to eliminate, precise to us that author.

Table 1: Synthesis of alignment main definitions

For this purpose, we constant in one hand that it does not exist consensual definition of the term « information system alignment » and in another hand, that few precisions are brought on the nature of the organization involved elements. In opposite, several similar terms are used into the literature, like « fit, adjustment, trajectory, link, coaction, bridge, coherence, congruence, etc. ». Each of those terms illustrate the first idea of coordination by means of action more or less precise to achieve a goal.

The works into the domain don't detail (or a little bit) the nature of the alignment notion, i.e. its essence, its deep nature and its attributes. Therefore, those works do not define precisely the notion.

The concept of « fit » that we find into the works of Miles R. and Snowe (1984) has first of all been applied at the relation strategy/structure. It should be to identify coherence between the possible best structure for carrying the deployment of global organization strategy.

Indeed, the works in that framework were exploredfrom years1990.Livari J, in 1992, initiate that way on underlining the necessity of adjusting the information system at that context.

The work of Henderson J. and Venkatraman N. in 1993 constitutes however the founder article of strategic alignment school. Trying to reply to the question « how to evaluate the impact of information systems on the enterprise performance » those authors suggest so that the organizational strategy and the relative strategy to information systems must be coherent. The organizational strategy and the information system strategy have to be aligned so the strategic alignment term.

2.2. The Performance as Dependent Variable in the Research in Information Systems

The performance constitutes a recursive term of management sciences research but also a concern subject for managers submitted to the obligation of unit's performance that they lead. We understand at once that that subject gives a big volume of literature without being able to find a compromise. Generally, that performance notion was often characterized as being a complex built and to multidimensional (Chan and al., 1997; Sabherwal and al., 2001). Inter alia, that notion was defined on several perspectives into the strategic management researches (Venkatraman and Ramanujam, 1986).

Indeed, it occurs that the performance notion integrates by definition certain «subjectivity». Saulquin and Schier (2005) indicate for that « the performance has rather facets than it exists observers inside and outside of organization. It is so defined by those who will use the information". For them: The concept (of performance) possesses so rather meanings than it exists individuals or groups who use it.

For a leader, « the performance may be the profitability or the competitivity of his firm; for an employee, it may be the work atmosphere; and for a customer, the quality of rendered services. The multiplicity of possible approaches does to it an over determined concept, and curiously, it stays undetermined due to sets diversity which compose the organization ». The works of Bergeron and al. (2004) define the performance in efficiency and effectiveness terms and argue that the performance is defined as being the enterprise strength and prosperity at long term facing to its competitors. It gathers to dimensions to know: sales growth and profitability. The first sends to the prosperity notion while the second is relative to the strength at long term of the firm. Also, from literature review, we constant that there is a consensus between authors (Gervais, 2001) on the two essential terms for defining the performance to know: the efficiency and the effectiveness. Concerning Kalika and Jouirou (2004), the performance can be measured by the objective or quantitative measurements which generally base on financial data and by subjective and qualitative measurements which make appeal to the leader's evaluation. For measuring that concept, those authors use the Vekatraman instrument (1989). Indeed, that instrument allows to evaluate the competitive position of the firm and consequently, its performance in terms of sales and profitability growth.

The majority of researches limit itself to the study of two factors namely the firm strategy and the IT strategy or between the enterprise structure and the IT structure.

Authors	Results
Bergeron f, Raymond l.(1995)	The alignment between the strategic orientation of IT management and business strategy has a positive impact on the performance.
Bergeron F., Raymond L., (2002)	The firm strategy, IT strategy, firm structure, IT structure co-alignment improves the firm performance.
Brownc. V., MagillS.L., (1994)	The IS function alignment favours the firm performance.
Chan Y.E., Huff S.L., (1993)	Narrow relationship between firm alignment and performance also IS function alignment and effectiveness.
Chan Y.E., Et Al. (1997)	The alignment between the firm strategic orientation IS strategic orientation favours the performance.
Croteau A.M., Bergeron F., Raymond L., (2001)	For prospection and analyze strategic comportments, the strategic comportments co-alignment with the choice and the IS management contributes significantly to the organization performance.
Jouirou N., Kalika M., (2004)	The IT strategic management must be carried out by taking account, in one hand, of SME, and in another hand, of its organizational structure to achieve a best performance level.
Kefi H., Kalika M., (2003)	The alignment between strategic choices and technological deployment favours the stretched firm performance.
Papp R.,Luftman J., (1995), Papp R., (1998)	About the adopted alignment perspective, and about the considered industry, the firm does not improve the same performance criteria.

Raymond L., Pare G., Bergeron.F (1995)	The alignment between the IT structure and the organizational structure has got a positive impact on the performance.
Saberwhal R., Chan Y.E.,2001	For the analyze and prospection comportments, the alignment between general strategy and IS strategy is favourable to the performance
Teo T., King W.R.,(1996)	Existence of four integrations types between the firm planning and the IS planning (administrative, sequential, reciprocal, and complete integration) which when they are coherent, improve the organizational performance.
Weill P., olson M.H.,(1989)	The contingency theory allows to better understand the IS impact on the organizations performance.

Table 2: studies concerning the alignment of IS/ IT and the performance

3. Conceptual Framework and Theoretical Approaches

3.1. The Contingency Theory

The contingency constitutes a particular perspective well adapted to performance explanation (Weill and Olson, 1989). The Chandler works (1962) already revealed the coherence between the choices of outside positioning and inside arrangements favours the firm economic performance. So numerous consecrated researches to Information Systems (IS) / Information Technologies (IT) adopt the contingent perspective on studying the relationship between alignment and performance.

However, the contingency theory on organizations theory was severely criticized. Thereby, Mohr (1971) or Penning (1975) call into question the fit and the performance hypothesis. Indeed, and in spite of the formulated criticisms to that theory, the strategy research had restarted a decade later, the contingency theory developments, namely the inside contingency elements. Venkatraman and Camillius (1984) give four arguments justifying the fit concept study in strategy. The first underlines that it is natural that the strategy research interests to the fit concept because it is built itself around resources alignment principle with environmental opportunities and threats. The second justify that theoretical loan by the fact that the research in strategy which constituted must have borrowed concepts which made their evidence into the nearby theoretical fields. The third argument is built on implicit use of contingency theory through the fit concept into the works in strategy following the Hofer appeal (1975). At the end, the fourth and last argument underlines the concept was, already at that time, used by consultants and practitioners. Venkatraman and Camillius search so to define different fit perspectives for the strategic management.

The relative obtained results to the alignment impact on the performance can be different and that according to the adopted approach for the alignment measurement (Bergeron, Raymond and Rivard, 2001). Therefore, it is vital to precise and to justify the retained perspective.

3.2. Alignment and Performance: Which Approach to Adopt?

Among the contingency theory approaches, Drazin and Van de Ven (1985) present three « Fit » interpretation ways: the selection, the interaction and the systems. According to the selection approach, the « Fit » corresponds to the congruence between the context and the structure (centralization, formalization, complexity) without that the performance can be taken in account.

The second « Fit » interpretation translate the interaction effect between the context and the structure on the organizational performance. It is the matter of explaining the changes of the organizational performance by the interaction between the structure and the organizational context. According to Drazin and Van de Ven (1958), those both first approaches are reductionist, because they consider that the organization can be divided into elements able to be studied separately.

On the other hand, the third systemic approach (system) considers that we must integrate several structural alternative contingencies holistically. The simultaneous coherence study between several dimensions thus allows a best understanding of the performance characteristics. Depending on « Fit » precision level (often linked to variables number that we wish to involve in the relationship) and whether making of relationship or not of alignment with a precise criterion as the performance, Venkatraman (1989).

According to the adopted approach for the alignment measurement, the obtained results can be different (Bergeron, Raymond and Rivard, 2001). It is so vital to precise and to justify the retained perspective.

To meet research goals, we have made the choice to adopt in the framework of this research a double alignment approach. It bases, at the same time, on bi-varied approach (or limited co-variation approach at pairs of factors), but also on the system approach.

First of all, according to bi-varied perspective, the « Fit » is measured to the interaction level of pairs of factors (Van de Ven and Drazin, 1985). The majority of researches are limited to a set of bi-varied relationships reduces the alignment explanative power (Bergeron, Raymond and Rivard, 2001; Reix, 2002-b).

So, it is important through the systems approach (Van de Ven and Drazin, 1985) to consider simultaneously the relationships set between factors; indeed, the co-variation is the most often used perspective. Its implementation ease (relative to perspectives like gestalts or profile deviation) favours in a large part its use.

The making of a factor of second order traduce the co-variation and the co-alignment between factors of first order (Venkatraman, 1989).

The IS alignment corresponds so to upper built issued from strategic, organizational and technological alignment.

That double approach (bi-varied and system), will allow to observe the alignment with precisions, at different organization levels (strategic, organization, technologies). Moreover, that perspective offers the possibility to study globally but also separately the effects on the alignment components performance.

4. Research Conceptual Model

4.1. Research Model Building
The strategic alignment concept or (Strategic Alignment Model SAM) developed by Henderson and Venkatraman (1993) is become the hard core of actual strategic paradigm. It stays as one of the most important basis of technological strategic role understanding into the firm.

The strategic alignment model SAM proper to IT and namely to IS function, it allows to appreciate the coherence with which the IS articulate in the rest of the firm.
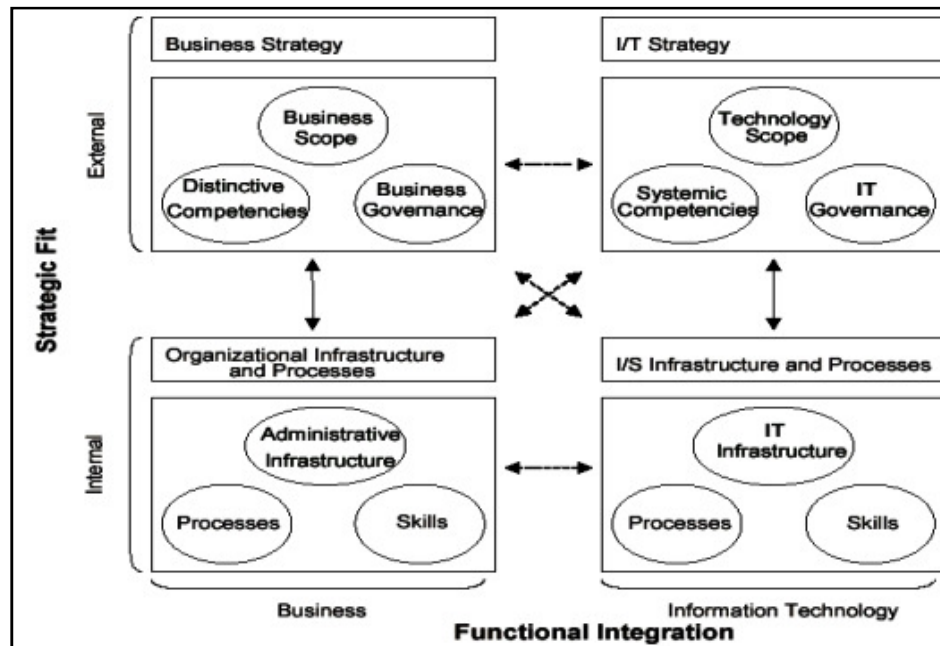

Figure 1: Strategic Alignment Model proposed by Henderson and Venkatraman (1993)

Indeed, that model realize around to main movements: in the one hand, « the strategic coherence » (strategic fit) between the firm outside and inside dimensions, between the strategy formulation and implementation; in the another hand, « the functional integration » (strategic integration) of IT into the firm. Those two movements performed around four dimensions: the firm strategy, the organizational infrastructure and the firm process, the IT strategy, the IT infrastructure and processes. (Figure 1).

With the aim of remaining faithful to the strategic alignment model, the model concepts definitions correspond to those proposed by Henderson and Venkatraman (1993). Nevertheless, to build our model it is necessary to make adjustments in order to give more precision.

Concerning the « firm strategy » and the « IS strategy », we interest particularly on the training processes and the IS strategy implementation relative to the firm strategy.

Concerning « the firm organization », we find:
- The administrative infrastructure including the organizational structures, their roles and their relationships.
- The processes concerning the matching work flows and information flows articulation to carry out the firm activity.
- At the firm IS structure level, we distinguish:
  - The technological infrastructure, to know, the different technological structures (tools and applications), their roles, and their relationships.
  - The processes matching to the work flows and information flows articulation.

The IS alignment comes from the coherence between, in the one hand, the IS strategy (elaboration process and IS strategy implementation), the firm organization (organizational structures and processes), and the IS structure (technological infrastructures and processes linked to IS).

The strategic, organizational and technological alignment, allow to characterize respectively the strategic management, the organizational choices, and the technological choices, linked to IS.

Indeed, the majority of research woks treating the IS question focused on the strategic alignment while it exists the other alignment approaches able to influence the performance, to know, the organizational alignment and the technological alignment, Reich and Benbasat, (1996);Chan, (2001).

Besides, it should be noted that the only presence of information systems, even though they are sophisticated, is not a necessary condition to assure the firm performance.

It is pretty through the articulation of those technologies to the strategy, to the organizational structure and to the technological infrastructure that they can improve the performance (Chan and al., 1997). Consequently, the IS alignment comes also from the joint

coherence between the strategic choices (strategic alignment), the organization conception (organizational alignment) and technologies use (technological alignment). Henderson and Venkatraman (1993) précised into the strategic alignment model (SAM) does not limit the alignment to the relationships between pairs of variables but integrate simultaneously the links set existing between the strategy, the organization and the technological infrastructure.

4.2. Research Hypothesis
The research model constitutes the consecration of hypothesis system logically articulated between them. Those hypothesis concern directly the research subject, to know, the impact evaluation of IS on the performance. It concerns more particularly to understand the performance linked to IS through the alignment perspective.
Indeed, the results on the performance present so, a particular interest on the measurement where they justify the investments in IT. The literature in information systems (IS), particularly in information systems strategy (Delone and MacLean, 1992 ; Seddon and Kiew,1994), has brought us to adopt widely a theoretical perspective used into the research in information systems : the « fit » perspective or « strategic alignment », according to which the organizational performance is the result of congruence (« Fit ») between two or several factors like the strategy, the structure, the technology, the environment (Weil and Olson, 1989).
In that way, the majority of researches treating about the relationship alignment / performance presented previously, highlight the positive effect of alignment on the performance, whatever the nature and the number of studied factors. The IS function alignment favours so the firm performance (Chedia Karoui,2012, Yann Rival, 2005 et 2008, Jouirou N, Kalika M,2004, Bergeron F, Raymond L, Rivard S,2002, Sabherwal R, Chan Y.E, 2001, Bergeron and Raymond, 1995; Bergeron and al.,1998; Croteau and al.,2001; Chan and al.,1997, Teo and King,1996, etc.). Thus appears the alignment notion which seems to be an imperative even a sine qua non condition for firms concerned by their performance. Thus our first research hypothesis presents like this:
- H1: The IS alignment is positively correlated with performance.

Otherwise, it should be noted that the only presence of the information systems, even though they are sophisticated, is not a necessary condition to assure the firm performance. Instead through the articulation of those systems to the strategy, to the structure and to the technological infrastructure that they can improve the performance (Chan and al., 1997).
Consequently, the IS alignment comes also from the joint coherence between the strategic choices (strategic alignment), the organization conception (structural alignment) and the technologies use (technological alignment).

4.2.1. Strategic Coherence
The strategic alignment refers then to the degree which the firm strategy and the plans, and the IT strategy and the plans complete each other.
McFarlan and al., (1983) underlined the IT strategic value importance through a strategic alignment and that by an articulation between the firm strategy and the plans, and the IT strategy and the plans. In that way, Porter and Millar (1985) supported the IT contribution into the organization competitive ability improvement. Reich and Benbasat (2000) consider the strategic alignment as « the degree until which the IT goals, projects and missions are aligned with those which belong to the firm. ». With that vision, it is hard that the strategic alignment produces itself if the strategies miss of a formal and documented plan (Vitale and al.;1986; Lederer and Mendelow, 1989; Wan and Taï, 2003).
Kearns and Lederer (2000) assure that it exists a separation between the firm strategy and the IS strategy, in the one hand, and the alignment models between the firm strategy and the IS strategy, in the another hand. The IS alignment with the firm strategy means that the IS management supports the firm strategic management Reich and benbasat, 1996).
In the another hand, the alignment model between the firm strategy and the IS strategy, affirms that the strategic management traduces the organizations experience and knowledge using the resources based on the information technology, and that explains a best management and an engagement of senior executives Bensaou and Earl, 1998).
Venkatraman and Henderson (1993) developed the links able to exist between the firm strategy and the IT strategy. They defined it in three components terms: the technology scope, the systemic competences and the IT governance. Chan and al.; (1997) concentrated on the « portfolio » applications alignment, the firm and its strategic orientation.
Kivijarvi and Saarinem (1995), Mingfing and Richard (1999) explained in their empirical works the strategic alignment moderation effect into the relationship between the IT and the firm performance. Vitale and al., (1986) agreed two distinct ways to study the relationship between the firm strategy and the IT strategy: the dependent approach and the impact approach.
The dependent approach means that the IT strategy should support the firm strategy as any other firm functional strategy, such the marketing, the finance or the production. While the impact approach means that the IT function may carry out the firm to achieve its goals and consequently to be determining into the firm strategy. As explained by Brown and Sambamurthy and al., (1999), the IT support the firm strategies offering them a strongest competitive maintaining.
While the previous studies insisted on the fact that the IT strategy and the firm strategy may have to be aligned, it is figured in the most recent studies that the different adjustments types may exist and that the organization performance depends to it.
Bergeron and Raymond, (1995) in their empirical researches supported the moderation model like the best for explaining the firm strategy alignment impact and the IT strategy on the organizational performance. Similar results were obtained by Chan and al., (1997) connected to the strategy alignment and the IS strategic orientation.
Miles and Snow (1978) specified a classification around the strategic alignment notion according to Hirschheim and Sabherwal (2001) is based on three arguments. First, the organization performance is relied to the organization adoption of an appropriated structure and its ability to execute its strategic decisions.

Moreover, the organizations invest more and more into the information technologies and that the senior executives understood that the business strategy influences the IT, by their turn, influence now the firm strategy, that involves the alignment concept bilateralism.

Thereby, other searchers did the appeal to model strategic dimensions STROBE (Strategic Orientation of Business Enterprises) of Venkatraman (1989) for measuring the IT impact on the firm performance, Johnson and Lederer (2010). Indeed, the majority of researches. (Bergeron and Raymond, 1995; Teo and King, 1996; Sabherwal and Chan, 2001; Kéfi and Kalika, 2003) treating the link between the IT strategic alignment and the firm performance had found a positive relationship. It is for that purpose we formulate so a second hypothesis:

- H2: The alignment between the IS strategy and the firm strategy is positively correlated with performance.

4.2.2. Organizational Coherence

The organizational alignment corresponds to the coherence between the IS and the organization structure. That alignment is influenced by decision-making connected to IS, hierarchical relationships, the IS centralization, and the IS personnel deployment (Chan, 2002).

Tavakolian (1989), Currie (1996) remarked that the information technologies into a decentralized firm allow the authority attribution and decisions on facilitating the broadcast and the information sharing into the whole firm. That justifies the alignment between the IS structure and the organization structure which was for a long time considered as determining for the firm performance explanation.

Brown and Magill (1994) advocated in their study a simple structural classification involving the IT structures which are centralized, decentralized, or hybrid. They supply proof that each structure can be effective in certain circumstances. In that purpose, the choice of a decentralized global structure, a culture of strong autonomy.

Bergeron and al., (2001) remarked that the only increasing of structural complexity has no impact on firm's performance. Meanwhile, on adding its structural complexity at the same time, the strongest IT management can increase its competitive abilities in growth and profitability terms.

Otherwise, it should be signaled that the IS structure is considered as alignment component and that according to three dimensions. The first dimension is the IS organizational architecture, which includes the IS function responsible department and the decentralized degree of IS organizational structure (Tavalokian, 1989; Allen and Boynton, 1991; Brown and Magill, 1994). The second dimension is that of technological architecture, involving the data integration and application degree, the technology calibration, and the material deployment nature (Ein-Dor and Degev, 1982; Leifer, 1988; Fiedler and al., 1996). The third dimension is the process and qualifications dimension, which includes standardization and planning mechanisms of approaches applications development (Allen and Boynton, 1991).

Ein-Dor and Degev, (1982); Tavakolia, (1989), based from the idea that the alignment is an alignment result between the IT structure and the organization structure, because they forecast that the IT structure is a reflection coming from organization structure characteristics. The studies which adopted that alignment conceptualization interested mainly to determine if such relationships existed.

Another part of research considers rather the alignment as a goal to achieve, and it focused to seek the way by which the IT function must be organized to align with the organization structure (Leifer, 1988; Allen and Boynton, 1991; Fiedler, Grover, and Teng, 1996).

Croteau and al., (2001) studied the alignment performance results between the organization structure and the IT structure opting for a co-variation perspective; they contested that a best organization alignment and IT by the simultaneous development of infrastructures, allowing to the firm a most increased growth and an added profitability. However, Henderson and Venkatraman, (1993); Croteau, (2004), consider the alignment as a common adjustment emerging from organization structure and IT abilities. Likewise, Hirshheim and Sabherwal (2001) indicate that the IS structure represents the IS function and IS responsibility configuration into the decisions. Thus, they distinguish three possibilities: the centralization, the decentralization and the sharing.

Likewise, the congruence between the IT strategy and the organization structure favours also the firm performance (Bergeron, Raymond and Rivard, 2002; Jouirou and Kalika, 2004). Thus, so we wish to test the following hypothesis:

- H3: The alignment between the IS strategy and the organizational structure is positively correlated with performance.

4.2.3. Technological Coherence

Bergeron and al., (2001); Croteau and al., (2001) contested that the adjustment in the technologies use constitutes a key factor to achieve a satisfying performance degree. It translates the coherence between the IT strategy and the technological infrastructure linked to IT (Broadbent and Weill, 1993; Henderson and Venkatraman, 1993).

Examining the works of Jouirou and Kalika (2004), they demonstrate that the IT strategic management should be made according to, the small and medium enterprises (SME) strategic choice and the organizational structure to reach a best performance level.

Moreover, the IT integration into the organizations is necessary and it is made in a progressive way, but mostly on trying to reply to the firm goals.

According to Markus and Tanis (2000), it is the IT integration degree into the organization which makes the firm to be most performance than another else.

Indeed, it should be signaled that the different person's abilities or units to treat and to transmit the information intra and inter organizational, constitutes one among the requirements of an effective organizational structure. However, and in the purpose of maximizing the firm value, the IS must be one of daily elements into the value chain activities and the firm strategy (Brynjolfsson and al., 2003).

Armstrong and al., (1999) integrated the IT assimilation notion into the organizational structure. Indeed, those authors define it as the IT broadcast degree into the organization and the supplementary effectiveness allowed through their use.

Thus, the recent managerial literature considers however a minimum of information technologies into the organizational structure, that we call « the IT infrastructure ». The IT sophistication, as précised in the works of Bergeron and al., (2001), manifests itself and measures itself through the organizational structure, in a one hand, and the information technologies, in another hand.

The coherence between the IT strategy and the IT structure favours also the firm performance (Bergeron and a., 2001; Raymond and al., 2010). Consequently, we will test the following hypothesis:

- H4: The alignment between the IS strategy and the technological structure is positively correlated with performance.

4.2.4. Culture Effect on the Alignment Process

Gallivan and Srite (2005) explain the moderator role of individual culture on the IT use and otherwise, on their alignment, they apprehend that the IT effects are not predetermined. They precise that the technology is « imperatively flexible » given the different meanings attributed by the individuals. However, the same technology will be understood differently by different users, according to their specific beliefs, postulates and worths (meaning, the culture). The symbolic meanings of individuals towards the IT will form their understanding and the comportment models by a particular way which can change over time, Nesrine (2012), Walsh (2009), Straub and al (2002).

The cultural dimension importance for the its strategic alignment was also sought by Leidner and Kayworth (2006) when they signal that the failure met by the organizations are most often associated to the cultural variable. It is recognized as a critical variable for explaining how social groups interact with the its. They precise that « An understanding of culture is important to the study of information technologies in that culture at various levels, including national, organizational, and group, can influence the successful implementation and use of information technology. Culture also plays a role in managerial processes that may directly, or indirectly, influence IT ».

Besson and Rowe (2001) precise that the leader culture and the organizational culture constitute two factors among others able to help to apprehend the ERP projects dynamism and to moderate the conflicts intensity. In other words, a cognitive similarity can carry out to a strong interaction between the individuals manifesting by the shared interests and the equivalent modes of communication. This allows to moderate the conflictual relationships and the interests and values differences (Witkin and al., 1977, quoted by Armstrong and Priola (2001).

Associated to the leader culture, Huang and HU (2007) give a great importance to the culture of the Information Systems responsible (ISR) and to his moderator effect on the ITs strategic alignment. They insist not only on that dichotomy but again on the imperative of a bivariant alignment between the business responsible (BR) culture and that of the ISR to avoid the « gap culture » situation.

More explicitly, Fimbel (2007) recognize that the approach of the strategic alignment depends essentially from attitudes and comportments of managerial stakeholders involved into that process and their interaction. The analyze of those interactions and the relationships allows to stand out that the cognitive, psychological, sociological and cultural dimensions between the actors in charge of an IS synchronization alignment manoeurvre.

At this level, we formulate our sixth research hypothesis by specifying that the culture of each actor influences on only his specific role but also the common roles of BR and ISR during the alignment manoeurvre where from:

- H5a: The BR culture influences not only his particular role but also his shared role with the ISR during the alignment process.
- H5b: The ISR culture influences as well his particular role than his shared role with the BR during the alignment process.

4.2.5. The Firm Size

Indeed, the IS strategic role is not perceived at the same way according to firms. For the big size firms, they may be more sensitive to the IS strategic role for coordination questions. This being so, some of reduced size firms may be extremely innovative (Kalika and al., 2003). However, the IS strategic perception constitutes a determining element into the IS alignment and performance, according to the firm size.

Several arguments militate in favour of relationship between the firm size and the IS use level. Indeed, more the firm staff grows, more the questions of coordination are asked with an important intensity and more the IS are susceptible to play an essential role. Currie (1996) checks the hypothesis concerning the fact that it exists a correlation between the organization size and the used IT. Otherwise, and in accordance with works of Kalika and al., (2002) the role of IS is perceived differently according to the firm's size but the size effect is not determining. Indeed, according to the proactivity criterion authors, it is just partially correlated with the firm size. Small size firms took initiatives at the same title than big firms and can be more innovative than those big and to perceive the IS use. We propose to test the following hypothesis:

- H6: The firm size influences on the IS alignment relationship on the firm performance.

4.2.6. The Firm Activity Area

The activity area seems to have an influence on the information and communication technologies use level. Indeed, Culpan (1995) shows that the attitudes in respect to technologies change in accordance to the activity area. She was able to put in evidence differences in technologies use between industrial area and services area. Likewise,for Rowe and Béal (1998), who showed the reluctance of banking area face to electronic messaging, the study of Kalika and al., (2002) showed clearly that the IT strategic role is variable in accordance with the areas. We propose to test the following hypothesis:

- H7: The activity area influences on the IS alignment relationship on the firm performance.

Having expressed the various proposals of research, we are going to present the model of research on which these hypotheses go appears as follows (Figure2);
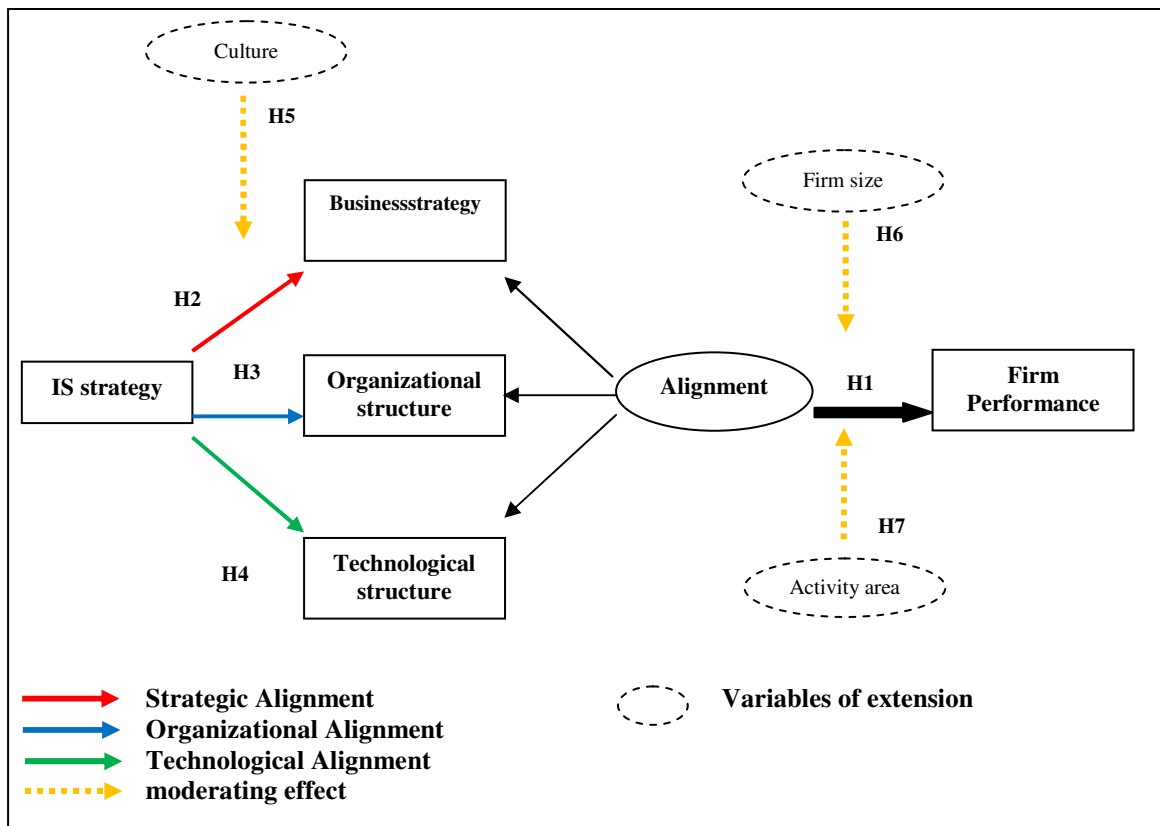

Figure 2: Model of research

5. Conclusion

In summary, the strategic alignment model of Hendreson and Venkatraman (1993) allows to illustrate the alignment concept in a more general way, the alignment notion belongs to contingency current developed namely by Weil and Olson (1989), which supposes that the organization performance comes from the (« Fit ») congruence between two or several factors like the strategy, the technology, the environment, etc.

In the literature review, we contested that numerous researches highlight the link between IS/ IT alignment and the firm performance, in opposite it exists no or few studies examining the existing links between different alignment shapes. However, those links traduce the mechanism at the heart of the firm performance formation.

Thus, from those three main alignment shapes (strategic choices coherence, coherences into the organization conception, coherence into technologies use), this research focusses in a first time to check the explanative power of contingent perspective in the firm performance study, in this case, the existing link between firm alignment and performance linked to the ISs implementation.

In a second time, we will therefore approach to examine the existing relationships between the strategic choices, the organization conception and technologies use with the relationships effect on the performance at different organization levels globally but also separately.

Indeed, the IS impact evaluation on the performance constitutes an investigation domain still little explored in Morocco. This research work proposes therefore to measure the implementation contribution of an IS on the firm performance. This positioning allows to answer a double goal. From an academic point of view, it is a question of going farther in the investigation field by pervious works enrichment treating the IS alignment problem and the firm's performance, and to fill the researches lack recorded at this level. From a practical point of view it is a question of answering to a need from the firm's leaders part having to adopt the IS.

At last, concerning the next steps of our research, they will consist to adapt our theoretical model to the firms into Morocco, via a hybrid exploratory qualitative approach, in order to refine the research conceptual model. This last will be tested, soon, on adopting a confirmatory quantitative approach.

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