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The Effect Of Organisational Factors and Technology Attributes on Information Quality

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Abstract: Information quality is now considered one of the key elements of what can be called organizational advantage. Although the practice of information quality sometimes focuses on the implementation of information systems, scholars often stress that the development and transmission of information within organizations are above all dependent on the modification of individual behaviors. Information quality is thus dependant on organizational factors, crucial for the structure of the organization. Information systems appear as catalysts dependant on the information quality. We argue in this study that the combination of two factors - organizational structure and technology attributes - affects the ability of a firm to develop information quality. Three variables were selected for each factor. First, we hypothesize that each variable taken independently has a moderate effect on information quality. Second, the fundamental hypothesis of the paper states that strong configurationally effects should be observed. Thus both the structural configuration and the technology configuration are expected to have a stronger effect than each of the six variables taken independently. Third, we expect to observe a stronger effect of the global configuration of all variables. Three models corresponding to the different hypotheses are then tested using ANCOVA analysis on a population of 514 Malaysia companies. The three assumptions were corroborated in the study, thus validating the idea that information quality is dependant on the elaboration of a coherent learning system that encompasses both organizational and information systems constituents.

Key words: Information quality, organizational factors, technology attributes, Malaysia

INTRODUCTION

Information quality is an innovative capability that is crucial to the companies' competitiveness. This message has been hammered during the 1990's in the business as weare living in a technological age with knowledge workers and information factories, who receive input from external information sources, analyze and manage information and create new knowledge. They give out information as output to external world, producing information products. Hence, the quality of information is a critical for the success of firms and managing information is their core competence. This is supported by Pugsley *et al.*,[1] in their study that an economy based knowledge emerge with information is essential for any ongoing organization. The globalization of products, services, markets and competition has increased the need for flexibility, quality, cost effectiveness and timeliness [2]. A key resource for attaining these requirements is information quality and it has revolutionized business practices and now plays a more central part of business strategies [3].

In such information quality no longer answers to the real and more human needs of the organization[4,5]. Information quality appears more and more as being a matter of behaviors that have to be linked with the culture and structure of the organization. The organizational implications of this are not sufficiently documented by the literature[6]. Still, it is possible, especially using the organizational learning literature, to find the structural and organizational factors that can explain changes in behaviors. An analysis of the research on the information quality shows that the evolution of information quality cannot be isolated from the technology in the firm. In fact, it can be hypothesized that the evolution of the individual practices of information quality depends on a joint effect of the organization structure and of the technology attributes. It is this fundamental hypothesis of configurationnal effects between the overall structure and the technology attributes that we corroborate in this research. The hypotheses are tested using multiple ANCOVA that allows us to study the combined effect of the explicative variables on the information quality.

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Information quality and the organization: Far from being limited to the implementation of technical tools, the capacity of organizations to manage information is rather linked to human factors. The major issue is to change the individual behaviors within a favorable organizational context. The information system rather appears as a catalyst than as the core of information quality. It is not the tool but the evolution of individual behavior that enables the organization to progress in its information quality practices. The evolution of the behaviors is all that makes the differences between a vast costly and useless information junkyard and the sharing or really useful knowledge within the organization[7]. Thus each individual must be actively committed[8], must accept to share its good quality of information with others and, thus, enter logic of cooperation. According to quality management literature, good product quality means that the product fulfills its requirements. In the beginning of quality management discipline, the concept of quality was applied only to products, however now discussions include quality of services and information. Quality management practices have positive impact on business performance[9]. However, the success factor is to recognize and develop core competencies of a business. Core competence is a capability to produce added value to the customer by combining existing resources and knowledge that has been growing in the company[10]. This capability to produce added value makes product or service imitations difficult to competitors. Since modern companies are information factories, their key competence is information management. Therefore developing information management skills and information quality is essential to their business.

According to Gelle and Garhu[10], providing better tools to manage information in organizations is an essential part of quality management in information factories. The modern view of quality consists of conformance to requirements (free of error) and the fulfillment of customer needs (quality of requirements and design). Information quality has been defined similarly as freedom of defects, such as inaccessibility, inaccuracy, out-of-date information, inconsistencies, incomplete and incomprehensive information and possessing desirable characteristics, e.g. timeliness, truthfulness, intelligibility and significance[11]. Information quality is typically conceptualized as a multi-dimensional concept. For example, in an early discussion of the quality of information systems, Davis and Olson[12] identify three aspects of data quality: accuracy, precision and completeness. Huh *et al*[13] define four dimensions of information quality: accuracy, completeness, consistency and currency. They define accuracy as agreement with either an attribute about a real world entity, a value stored in another database, or the result of anarithmetic computation. Completeness is defined with respect to some specific application and refers to whether all of the data relevant to that application are pressent. Consistency refers to an absence of conflict between two datasets. Currency refers to whether the data are up-to-date.

Fox *et al*[14] identify these four dimensions of information quality (accuracy, completeness, consistency and currency). Accuracy refers to whether a information value matches some value considered to be correct. Completeness means that a collection of information contains values for all fields that should have values and that no 3.records are missing. Consistency refers to whether information values conform to constraints that have been specified for that information. Currency refers to whether an information value is up-to-date. In contrast to these conceptual frameworks, Zmud[15] and Madnick and Wang[16] present definitions of information quality derived from empirical observation. Zmud[15] used factor analysis to examine the dimensionality of the construct of information. Four dimensions were derived: quality of information, relevancy of information, quality of format and quality of meaning. Madnick and Wang[16] use observations of defective information in organizational databases to derive four components of information quality: completeness, accuracy, appropriateness and consistency. Wand and Wang[17] argue for a definition of information quality that is task-independent and identify four dimensions of intrinsic information quality: completeness, lack of ambiguity, meaningfulness and correctness. These dimensions are said to be applicable across different applications applied to different tasks. On the other hand, increased speed and accuracy of information should strengthen relationships. Carter and Narasinhan[18] highlight accuracy and timeliness as important elements of information quality.

It thus appears that the success factors to information quality are above all to be linked with the organizational aspects and with technological developments. A first answer would be to attribute a key role to the direct commitment of management. This implication of the management is certainly a necessity but it does not give us much information on the organizational changes that are to be made. We can consider that it is thanks to the development of social links within a favorable structural context that information quality can be improved with technology attributes. We can thus hypothesize that, because of their structure, some organizations are better prepared than others to information quality.

STRUCTURAL CHARACTERISTICS FAVORABLE FOR INFORMATION QUALITY

The management literature, prolix when stressing the importance of cultural change, is less explicit when the structural conditions favorable for information quality are concerned[19]. Nevertheless three characteristics emerge from a combination of exploratory studies and the literature on organizational learning: the degree of hierarchy, the structural form and the orientation of inter-individual networks.

The degree of hierarchy: A first important structural characteristic for information quality is the existence of an autonomy allowing the emergence of some form of creative chaos. Autonomy, chaos and fluctuation[20], the existence of a degree of freedom and of an ambiguity in the authority relationships[19] and the adhesion generated through empowerment[21] are important structural characteristics as far as information quality is concerned. One of the key characteristics of the organizational structure is a limited hierarchy. The degree or hierarchy is thus the first structural variable that we will use to explain the information quality.

The structural form: The learning organization is also characterized by a structure were the project dimension primes over the functional dimension[19,22]. There is indeed a contradiction between the vertical orientation of a structure by operation and the need to exchange horizontally the information within the organization[23]. The more classic structures, by operations or by functions, rely on vertical integration of information. The structural form by function: operations or project; can thus be4.hypothesized as having a direct impact on the capacity of an organization to manage information; it will be the second structural variable that we will use for this study.

The orientation of inter-individual networks: Nahapiet and Ghoshal[24] underline the importance of the network links configuration that structure exchanges between the members to the organization. Networks must allow access to knowledge, timing access and referrals on the possibilities of exchanges. The organization must thus provide individuals with fast access and possibilities of vertical horizontal exchanges. It appears that the openness of organizational network is an important structural factor. The freedom granted to individuals to exchange transversally within the organization is the third structural variable that we will use for this study.

TECHNOLOGY ATTRIBUTES AND ITS ROLE ON INFORMATION QUALITY

Event though structural factors are determinant; the use of technology remains an important facilitating factor. Technology allows information storage, its treatment and its circulation[25,26]. For instance, the automation of tasks within a workflow system generates a flux of electronic documents that constitutes a essential source for organizational memory[27]. Thanks to knowledge databases, Intranet applications, collaborative work tools, the storage, circulation and sharing of information are considerably eased. The important of information quality can only be conceived if each factor within the organization really adopts this tool, which is possible only if he/she is confident with the use of technology within the organization. The concept of technology attributes gives a good account of this preoccupation. Technology attributes can be defined as: the shared, enduring perceptions of salient aspects of the IT work environment, i.e., the organizational practices, procedures and forms associated with technology-related activities, by an organization's (or organizational subsystem's) members[28]. A favorable technology attributes appears as an important factor in the success of information quality.

Information system and bureaucracy: Technology can reinforce decentralization within the organization by increasing the autonomy granted to operational units[20]. Nevertheless, Malone[29] stresses the fact that they can also be a powerful tool for the management to exert its authority. Thanks to the information system, managers can impose routines to the agents[29]. Companies' information systems such as Enterprise Resource Planning (ERP) tend to formalize operational processes and thus reduce individual autonomy. This loss of autonomy generally leads to change resistance that can even lead to the failure of such projects[30,31]. If the ERP constitute the ultimate step in process formalization, other applications such as workflows can be used to rationalize and impose routines to the actors in a bureaucratic manner. Thus, the best practices available in an information system can be considered as a method to impose the step of a process[32]. The use of technology to impose the steps of a process is the first variable we use to characterize the technology attributes.

Information system and control: Technology also authorizes a detailed traceability of the actions they help to realize. The rapid and massive development of electronic communication technologies offers the

management a unique possibility to control constantly all the personnel. More and more companies use their information system to control the activity of their employees[33,34]. In this perspective the management can collect for moderate cost 5.reliable and precise information on the productivity of the personnel. It is thus possible to develop the information system so as to increase the

control within the organization. The usage of technology with an objective of control is the second variable we use to characterize the technology attributes.

Information system and transversality: Technology and groupware tools can be used to develop communication and coordination within a company notwithstanding despite the different functional belongings or the space/time distance between teams or individuals[35]. Thanks to such tools, transversality and network relationships are possible[36]. Project groups and teams can work together whatever the localization of their members. The third characteristic that we will take into account to characterize the technology attributes is the use of technology for a transversal purpose.

HYPOTHESES

We have identified six explicative variables. A classic hypothesis scheme could lead us to limit our approach to testing a set of six hypotheses in which each variable would be tested independently, without taking into account the effect of interaction between them. In so doing, we would consider that the link between structural factors and technology attributes were irrelevant. Three models can be distinguished to analyze the effect of dependant variables:

- An independent model in which each explicative variable has an independent\ effect on the dependant variables (in that case, the hypothesis of configurational\ effects is not taken into account).
- Hybrid models in which a configuration of structural factor and a configuration regarding the technology attribute are taken into account.
- A global model in which a global configuration of structural and technology attributes are considered.

The discussions of the previous sections plead towards testing at least the grouping corresponding to the hybrid model: the effects of structure and of the technology attributes are clearly identified in the literature. Still, it is possible to further develop the configurational approach. According to the global approach, we can expect strong interactions between the structural and the technology attributes variables. The global configuration model is thus likely to be the more appropriate. We can thus postulate the existence of independents effects of each of the six variables identified on information quality (H_1); we can also formulate two supplementary hypotheses, one corresponding to the hybrid model (H_2), the other one corresponding to the global model (H_3).

H_1: Each of the six independent variables has a moderate effect on information quality

H_2: The structural configuration (combination of the three structural variables) and the technology attributes (combination of the three technology variables), both have a stronger effect on the information quality than each variable taken independently

H_3: The global configuration has a stronger effect than each of the sub-configurations (structure and technology attributes) on the information quality

RESEARCH DESIGN

We also present the results of three statistical models built in order to test the hypothesis. The models use the Covariance Analysis (ANCOVA), which allows us to study the 6.interaction effect linked with configurational effects. The independent variables are presented first (structure and technology attributes). Then we present the dependant variables that capture the information quality. Two nominal variables are used to operationalize the degree of hierarchy (HIERARCHY) and the structural form (FORMSTRUC). The orientation of inter-individual networks has been measured through a scale variable (FREECONTACT). We used a five level likert scale. Three scale variables - five level Likert scales – are used to characterize the technology attributes. The questions analyse the use of the information system within the organization. The three variables deal with: bureaucratic uses of technology (FORMWORK), tranversal use (ISCOORD) and control use (ISCONTROL).

Information quality can not be considered as unidimensional concept. From identifying knowledge to exploiting it, five variab les have been used to capture its different aspects: accuracy (ACCUCY), completeness (COMPNESS), consistency (CONTCY), currency (CURRCY) and information sharing (INSHANG). For each item we asked respondents to indicate the degree of agreement on a five-point Likert-type scale ranging from (1) strongly disagree to (5) strongly agree.

Data collection and respondents profile: The survey was administered to a population of managers belonging either to the top management: CEO, information system manager or human resources manager. One person\ was surveyed for each company in the sample. The sample is composed

Table 1: Results of the principal effect ANCOVA analysis (no interaction)

	Accucy		Compness		Contcy		Currcy		Inshang	
	Signif.	Eta^2	Signif	Eta^2	Signif.	Eta^2	Signif.	Eta^2	Signif.	Eta^2
Adjusted Models	.000*	.215	.000*	.281	.000*	.256	.000*	.208	.000*	.280
Constant	.000*	.490	.000*	.524	.000*	.563	.000*	.492	.000*	.491
Hierarchy	.819	.001	.925	.005	.989	.002	.572	.012	.473	.014
Formstruc	.241	.009	.022**	.024	.006**	.033	.586	.003	.091***	.015
Freecontact	.082***	.026	.555	.010	.116	.024	.346	.014	.651	.008
Formwork	.000*	.071	.000*	.116	.000*	.092	.013	.040	.000*	.133
Iscoord	.102	.024	.000*	.081	.015**	.039	.000*	.079	.000*	.081
Iscontrol	.021**	.036	.650	.008	.008**	.043	.274	.016	.724	.006
R^2 ajusted	.157		.195		.201		.150		.228	

* p< 0.001 ** p<0.05 *** p<0.1

Table 2: Results of the ANCOVA analysis with structure and technology attributes interactions

	Compness		Contcy		Currcy		Inshang	
Variables	335		331		338		340	
N	Signif.	Eta^2	Signif	Eta^2	Signif	Eta^2	Signif.	Eta^2
Adjusted model	.000*	.602	.000*	.704	.000*	.580	.000*	.604
Constant	.000*	.505	.000*	.498	.000*	.429	.000*	.450
Hierarchy	.655	.017	.468	.024	.073***	.049	.410	.025
Formstruc	.500	.007	.103	.024	.350	.011	.257	.014
Freecontact	.186	.031	.075***	.044	.060***	.045	.194	.030
Formwork	.001**	.087	.002**	.088	.002**	.085	.001**	.086
Iscoord	.770	.009	.000*	.103	.001**	.094	.002**	.082
Iscontrol	.310	.024	.344	.023	.002**	.082	.780	.009
Structure	.010**	.279	.038**	.259	.093***	.234	.019**	.262
Utilsysinfo	.001**	.395	.000*	.473	.000*	.399	.211	.290
R^2 ajusté	.315		.487		.282		.325	

* p< 0.001 ** p<0.05 *** p<0.1

Table 3: Results of the ANCOVA analysis with global interactions

	Accucy		Compness		Contcy		Currcy		Inshang	
Variables	335		331		333		338		340	
N	Signif.	Eta^2	Signif	Eta^2	Signif	Eta^2	Signif.	Eta^2	Signif	Eta^2
Adjusted model	.000*	.928	.000*	.950	.009**	.856	.000*	.952	.000*	.905
Constant	.000*	.909	.000*	.938	.000*	.860	.000*	.938	.000*	.875
Hierarchy	.199	.095	.257	.090	.926	.019	.010**	.179	.274	.078
Formstruc	.022**	.100	.000*	.279	.011	.119	.179	.045	.017	.101
Freecontact	.000*	.297	.021**	.154	.030**	.138	.001**	.228	.255	.066
Formwork	.000*	.422	.000*	.638	.000*	.300	.000*	.337	.000*	.542
Iscoord	.012**	.161	.000*	.519	.156	.088	.000*	.582	.000*	.351
Iscontrol	.000*	.262	.192	.085	.008**	.176	.004	.183	.455	.046
Configlobal	.000*	.909	.000*	.931	.139	.807	.000*	.940	.000*	.869
R^2 ajusté	.668	.758	.327	.785	.584					

* p< 0.001 ** p<0.05 *** p<0.1

Table 4 : R^2 and adjusted R^2 obtained in the three models

	Accucy		Compness		Contcy		Currcy		Inshang	
	R^2	R^2aj.	R^2	R^2 aj.	R^2	R^2 aj.	R^2	R^2 aj.	R^2	R^2 aj.
Model 1	.215	.157	.281	.195	.256	.201	.208	.150	.280	.228
Model 2	.602	.315	.704	.487	n.s.	n.s.	.580	.282	.604	.325
Model 3	.928	.668	.950	.758	.856	.327	.952	.785	.905	.584

of Malaysia manufacturing companies (50-5000 employees). After eliminating non responding items, we get 344 usable questionnaires.

Test of the hypotheses: The statistical tool was to be adapted to the nature or our variables (a mix of scale and nominal variables) and to our objective of testing the existence of configurations of variables. The concept of configuration suggests a combined effect of the independent variables that can be measured by the interaction effect of the variables. We thus had to use several Covariance analysis (ANCOVA). Each model uses one ANCOVA for each information quality variable.

Model 1: Independent model (H_1): In order to corroborate the first hypothesis (H_1), a covariance analysis is realized

for each independent variable without taking into account the interaction effects (Table 1).

Model 2: Hybrid model (H_2): A covariance analysis including some of the interaction effects is then conducted for each dependant variable. Testing the hybrid model, we only consider the structural and technology attributes interactions (Table 2). Two configurations are thus tested:

- The structural configuration, corresponding to the interactions between the three structural variables (HIERARCHY*FORMSTRUC*LIBCONTAC);
- The technology attributes configuration, corresponding to the interactions between thethree technology attributes variables (FORMWORK*ISCOORD*ISCONTROL).

The variable corresponding to the accuracy (ACCUCY) is not tested because the variance Test (Levene test) is not significant.

Model 3: global model (H_3): In order to test the existence of a global configuration (H_3), we build a third model in which we include the interaction effects between the six dependant variables (Table 3).

Comparison of the models: The three models can be compared using the adjusted R^2 . We use adjusted R^2 to take into account the different sizes of the samples for each information quality variable. If we 8.observe a significant increase in the adjusted R^2 , we can then infer the existence of a configurational effect (Table 4).

To complete the R^2 analysis we also use eta indexes, which measure the strength of the association between two variables. The value commonly used to assess the strength is those listed below:

- eta = 0 ⇔no association
- eta < 0.1 ⇔ very low association
- 0.1< eta < 0.3 ⇔low association
- 0.31 < eta < 0.49 ⇔moderate association
- 0.50 < eta < 0.7 ⇔strong association
- eta > 0.7 ⇔very strong association

RESULTS

Model 1: If the covariance analysis are globally significant for each dependent variable, the significance of each independent variable is much more contrasted. The degree of hierarchy variable (HIERARCHY) is never significant on the information quality variables. The structural form is only significant for four dimensions (BESTPRACT, KDBASE, ISCONEXP, TEAMWOL). The FREECONTACT variable is only significant with the BESTPRACT variable, but we can observe that the eta suggests a low force association. The technology attributes variables are globally more frequently significant, with some limits as only the variable corresponding to the bureaucratization phenomena (FORMWORK) is significant on all the dimensions. All the adjusted R^2 are inferior to 0,25. The eta analysis shows that the association effects reach a maximum of moderate for the ISCOORD and ISCONTROL variables. The other association effects are all very low. We can thus conclude from the analysis of this first model that the structural and technology attributes variables do have a significant impact with some dimensions of information quality but that the strength of the association is globally very low.

Model 2: The covariance analysis could not be performed on the ISCONEXP variable because the variance homogeneity test was not significant for this variable. All the covariance analysis are significant on the four information quality practices variables; adjusted models are all very statistically significant. The significance of the variables taken one by one show that the interaction between the structural variables (STRUCURE) is significant for all the dimensions of information quality included in the research. The result is the same for the technology attributes configuration with one exception: the effect is significant for the entire dependant variable except for TEAMWOL.

This model increases considerably the total explained variance as all the adjusted R^2 increase and are now included between 0.282 and 0.487. The eta analysis shows that this model has more explicative power than the previous one. Both the structural and the technology attributes configurations have a strong association effect: the eta values are all 9.included between 0.51 and 0.63. There is only on exception: the association between the structural configuration and the UNEXPRO variable is only moderate with an eta of 0.48. The independent variable has individually a very low association power. Finally, the etas are systematically higher for technology attributes configuration than they are for the structural configuration.

Model 3: The third model tests the hypothesis of a global configuration effect. The global configuration is very significant and this result is confirmed for all the dimensions of information quality. The etas analysis confirms this result: all the associations are very strong with eta values superior to 0.8. This is confirmed by the adjusted R^2 (Table 2): they are much higher than in the

preceding model as they now range from 0.327 to 0.785.

The value of these adjustedR^2 is very high and confirms the explaining power of this third model. More generally, this last model is very satisfying as far as significance is concerned: the significance of each variable taken individually is much higher than that of the other models. This result clearly shows the interaction effects of the global configuration. When all structural characteristics and the technology attributes dimensions are aligned, each dimension has a deeper impact on the information quality.

DISCUSSION

The comparison of the three models – independent, hybrid and global: leads to the conclusion that structure and technology attributes configurational effects do exist in relation to knowledge management practices. The global model has the higher explicative power, thus confirming a global configurational effect between structure and technology attributes. The successive analysis of the three models globally corroborates the three hypotheses, even though the first hypothesis is only partially validated. There is indeed an effect of some of the independent variables when they are introduced independently in the model. Nevertheless, these effects are not systematic and the association is very low to moderate. A set of hypotheses built on the independent model, that is to say excluding any interaction effect, would have led only to a partial validation. In such a scheme, two variables have a stronger explicative power: the bureaucratization variable (FORMWORK) and the transversal one (ISCOORD). Hypothesis 1 (H_1) is thus only partially validated.

The second hypothesis (H_2) is clearly validated: there is indeed a configurational effect in the hybrid model due to structure and technology attributes. Finally, the third hypothesis (H_3) is also validating. In the global model, for which the R^2 are clearly superior as in the other two models, it is the interaction between the independent variables for which
the association is the stronger. The identification of experts within the company thanks to the information system is not significantly associated with the configurational variables, neither in the hybrid model, nor in the global model. On the other hand, this variable is significantly but weakly associated to four of the six independent variables.

The data analysis thus corroborate the main hypothesis according to which it is above all the interaction between the structure and the technology attributes that influences information quality. It is thus through the global alignment of structure and technology attributes within a coherent configuration that gives the key to information quality. If we further analyse the results, we find that the global effect is not the same, depending on the dependant variable we are considering. We can first of all distinguish the search of an expert, a variable for which configurational effects, with three or six variables, are not significant. This result can be explained by the relative simplicity of this aspect of information quality.

This certainly can be achieved even if the structural and technology attributes are not completely favourable to an optimal quality of information.

CONCLUSION

The fact that we used five dimensions to characterize information quality leads us to the conclusion the effects of the structure/technology attributes global configuration is also dependent on the nature of information quality the organization wants to obtain. The more these practices are dependent on a cooperative mindset and on a strong implication from individuals the more determinant the effect of the global configuration. On the opposite, for a simple task, concerning easy to manage information, for instance through technology tool, the configurational effect is not as determinant. This point opens numerous practical implications. The utilisation of five dimensions introduces some evidence in the concept of information quality. A too global

perspective of information quality without taking into account the scope of necessary changes is certainly the source of getting quality information irrelevant to the organizational context. The sharing of best practices and of the results of group works are more dependent on the structure and technology attributes. Thus, some results might still be expected for such objectives with adequate accompanying programs in a reasonably favourable organizational context. On the other hand, for practices implying a direct commitment of individuals – a condition necessary for the continuous update of a really useful database or for the usage of the information order to develop innovative projects – the structural context and the technology attributes must be aligned and the configuration effect is very important. It is interesting to note that the update of information database fits in this category. This gives an explanation for the constitution in some companies of sophisticated databases that are either not updated or not really used. If we suggest that information quality plays a key role in competitiveness, it is only if managers are conscious of the importance of the

necessary changes. The information system can only play its role if the technology attributes is favourable which may imply important efforts of training, communication. But the necessary changes go beyond the obvious necessity to communicate. What is at stake is to change the behaviours and overcome psychological barriers that can sometimes be deeply engraved. The evolution of the organization towards a learning more organic form seems necessary, even for a project relying on a database if the full potential of information quality are to be reached. On a purely academic ground, the originality of the methodology we used in this research allowed us to address the question of the existence of configurations thanks to covariance analysis. The use of several models of independent variable finally allowed us test several configurational models. This work opens an important research track. We indeed show that the interaction between independent variables constitutes a determinant factor for the understanding of the model studied. Nevertheless, our conclusions do not address the nature of the configurations effectively emerging within the

company studied. Future researches can study the nature of these configurations: what is the combination of attributes effectively viable.

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