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PROTOTYPE OF INFORMATION SYSTEM OF A COOPERATIVE ACTIVITY IN BUSINESS NETWORK

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ABSTRACT:
This article presents a prototype named "ALPHA-MODEL" for the simulation of an information system as part of a cooperative activity. We limit ourselves here to only describe the modeling of single process starting from the CIMOSA modeling method whose objective is to provide a support throughout the life cycle of an information system since its implementation, through use and maintenance of networks to help company managers to simulate their specific model of information system facing a cooperative activity.

KEYWORDS: business network, prototype information systems, make-do, processes**.**

INTRODUCTION:

The corporate network is a particular form of business that aims to connect, thanks to information technology and communication, separate organizations for the purpose of producing goods or common services. The objectives of this particularity are basically looking for the organizational flexibility, increased quality, reduced costs and refocusing on core businesses. Several works have been dedicated to the modeling of their information system as part of a cooperative activity. However, their use is far from widespread. One possible reason is the lack of a control mechanism which should enable effective coordination of different internal and external information of the information systems of all partners. In addition, these works suffer from their lack of integration into a comprehensive modeling process. Research is still towards a static methodology that does not take into account the specificities of the information systems of partners that can participate in a cooperative activity. Overcome these difficulties returns to imagine another modular formalism that can integrate all internal and external data to obtain a concise, coherent and non-ambiguity networks to help its companies to better coordinate a cooperative activity It is proposed in this paper and to present the prototype of which is limited to a single process after succinctly defines "network company "This article concerns a part of the establishment of a new specification approach to the design of network business information systems [9]This should facilitate the coordination of common data, heterogeneous, of different qualities and different sources. It is this act of coordination, specifically the way it operates or should operate, we offer through [9].Its goal is the improvement and extension of existing models so that they coordinate internal and external information for processing networks business information as part of a cooperative activity.

DEFINITION OF A BUSINESS NETWORK:

According to the work of [1], the network company is a company that focuses on the activities it does best. It creates partnerships with "preferred" customers to facilitate the design and manufacture of products, improve the production process in close collaboration with suppliers, says some of its activities to other partners capable of achieving at lower costs and of better quality. It builds on its strategic relationships rather than its size to achieve its objectives. In other words, it is a business that takes advantage of the expertise of its partners to outsource activities that could be kept in-house. In doing so, the company hopes

to essentially reduce network costs, increase flexibility, access to more varied resources, enjoy advanced expertise, reduce the risk associated with its projects and reduce its internal structure. All these management options allow it to enter new markets, to be more competitive and increase its economic value. In [3] the corporate network is a group of companies linked to each other by a production cycle. The link is neither legal nor structural; it often takes the form of simple arrangements.

These companies are based on a powerful functional cooperation system in order to optimize overall, they extend control of their flows beyond their borders to integrate their suppliers and customers.

The success of these intercompany cooperation requires implementation of concerted actions, mutual trust, sharing information, a will to do better together and learn from each other. The term "business network" to some authors, is related to the concept of networking. The networking (networking) is defined by [2] as a strategic process of configuring the network by selecting its nodes, forging its links and orchestrate it to fulfill its mission, according to the needs and aspirations of actors it aims to meet.

Operationally, networking involves deciding what spot he will keep in-house and which to outsource in the strategy of "do" or "do together."The option of "doing" involves the joint responsibility of the company with one or more external partners when looking for a good strategy. The satisfaction of customer needs remains the primary objective regardless of its strategy. This objective requires good control of information flows, physical and financial beforehand. But this good will who gives birth to a partnership is not immune dysfunction; This is why it is essential to provide management arrangements such as the establishment of standardized procedures for the coordination and conflict resolution.

STRATEGY FORMS:

From the different work [4] it is distinguished different management strategies for networking companies namely the type of control strategies, type of coordination and kind cooperation. As part of the control type of strategy, relationships are almost -hiérarchiques kind between the principals and partners: This is a quasi-vertical integration that is found for example in the automotive sector. As part of a coordination type of strategy, a central firm (pivot) coordinates the various interests to the value of property; (Eg non-manufacturing industrial companies: Benetton, Nike).In the framework of cooperation type of strategy, partners come together to conduct a joint project involving the skills of each. This configuration differs from the previous in that there is no pivot company. All these strategies differ from each other depending on the nature of the cooperation inter-company (outsourcing, partnership, etc.), operational arrangements for management and monitoring and control devices. The interest in the concept of strategy is based on a global view of the network company. As part of our approach, it is a type of control strategy.

PRINCIPLE OF MODELING AND PROTOTYPING:

A strategy is defined, a model must be "designed and developed," and later, you have to "validate" that is to say, checked by a prototype. Placed in this situation where you have to make a decision, an individual, consciously or not, imagine a number of possible actions, uses the representation that he imagines the situation (model or approach) and proceeds to Prototyping is -dire -to develop a small application to verify the reliability of the results and imagine the consequences of alternative actions. The completed prototype, it runs among the different actions should be the consequences seem favorable to him as to the purpose it has set. Of course, sometimes the result of the action taken is more or less different from what is expected; it means that either the model or approach advocated the individual is more or less correct, it's -to- say does not reflect the reality, or else an error was committed in the prototype, c is - to - say in the process of reasoning applied to the model. In either case, the discrepancy between forecasts and reality will correct either the approach or the simulation prototype. Modeling approaches and prototype are inseparably linked so that modeling is still by definition a purely intellectual approach [5], the prototype is against the applicative approach which consists in an artificial reproduction of a real application that we want to implement, to observe the behavior of this reproduction when in fact experimentally vary certain parameters, and to induce what would happen in reality under the influence of similar variations. [5] We use prototyping techniques primarily in the following situations:- Either one is unable to use direct experimentation because

of the technical impossibility. [6]- Either you do not have a solid theoretical and practical on a given phenomenon, we seek to develop an approach, by prototyping that enables reporting of observational data. [9]

ILLUSTRATION:

To illustrate the work of our approach, [9] we considered a type of industrial business networks. In its gain maximizing management strategy, the decision is to entrust a partner a precise spot.

By analyzing the features of its information system, we noted that the approaches used for its implementation had enormous potential to manage the complexity and abundance of information in a specific field, against, were unable to take consider aspects of coordination of information between internal and external processes, monitoring of the evolution process, taking into account the changes logging, and finally the organizational structuring process involving all personnel involved in treatments based actions that each must perform. This network company produces carbonated and alcoholic beverages. The organization of production is divided into two main processes quei are: manufacturing management (process 1) and transportation management (Process 2).Decision making is to manufacture all products within the company and to entrust the management of the transmission to a partner (strategy to do) for delivery in various storage sites in order to reduce costs and maximize gains Apply our modeling approach in the process 2 according to [9] This process for the management of transport. It is divided into transport chain (Process 2.1) and flow management (Process 2.2).2.1 The process, that of the configuration of the transport chain includes operations where storage and delivery activities This configuration is to determine the location of the various storage and distribution sites, as well as the flow of products and related information to these sites to adequately meet customer needs. As' in the configuration of flows (2.2 Process) operations are those from choosing the trucks and routes. Flow management is to organize the flow of goods and information within each site by determining the precise route of the production plant to the different storage sites to avoid stock-outs. This is, overall coordinating production operations, planning, monitoring and controlling the supply chain during the transport of products by providing maximum flexibility and efficiency. The application of the treatment is to be made in the sequence of screens resulting in two copies of the print states: plug control and follower manufacturing sheet.

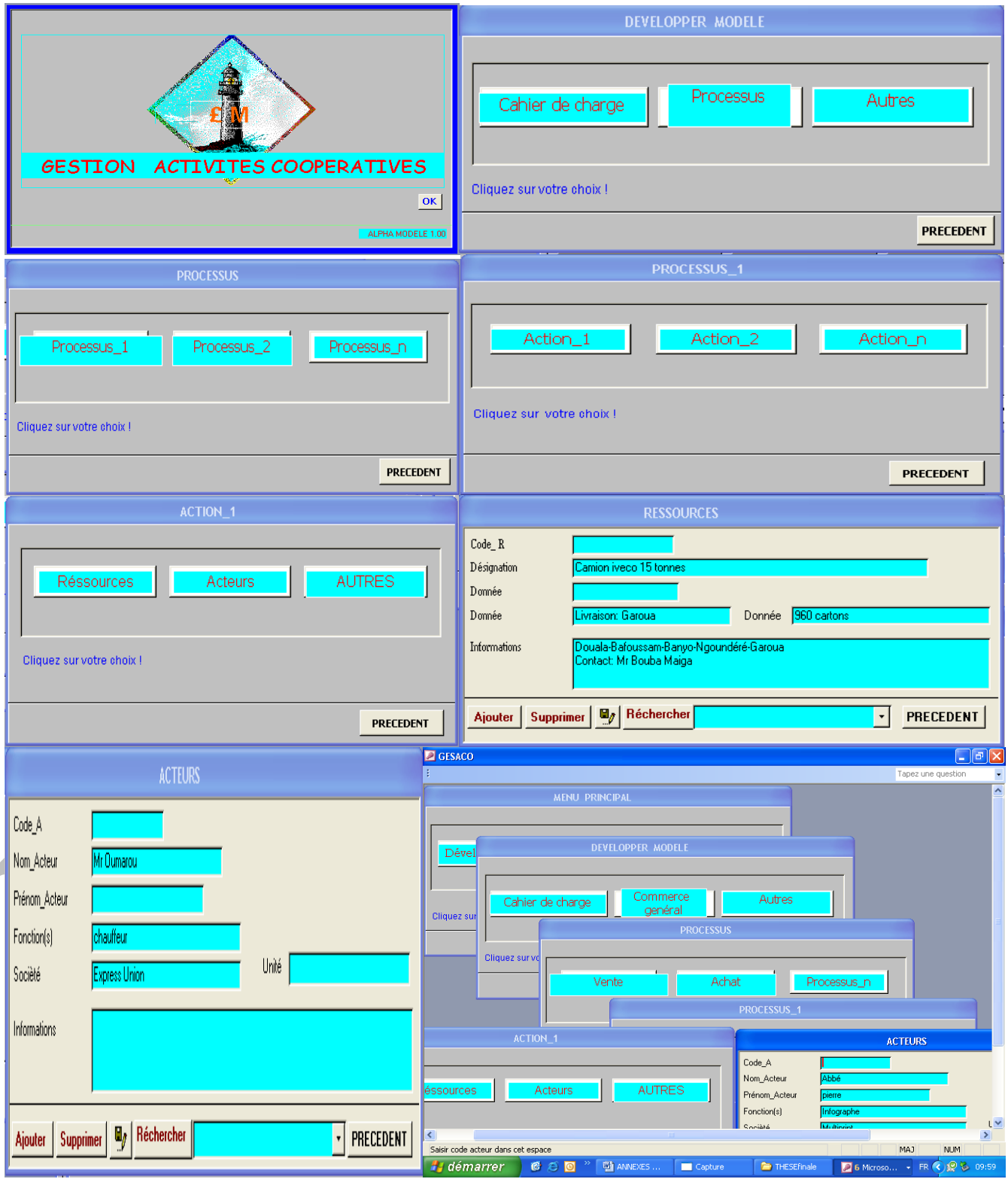
CONCLUSION:

We have in this article tried to present a single process from the CIMOSA modeling method.

Subsequently, we have scheduled several interfaces. These networks will enable business managers to simulate their particular model of information system. The goal is to monitor in real time the task it has entrusted to a real-time partenaire.

BIBLIOGRAPHIE :

1. Booch G. Et Rumbaugh, (2000) Le guide de l'utilisateur UML, Eyrolles, Paris, (2000) (traduction de : the unified Modeling Language Guide)
2. Boussagol, (2001) "Des Systèmes informatiques aux systèmes d'informations" SOSI CNRS (1996).
3. Burgers et Al, (1993). A theory of Global strategic Allinaces : the Case of the Glob. *Strategic Management Journal*. 14 : 6. 419-432.
4. Chanlat, J.F, (2000). L'individu dans l'organisation, Québec, PU Laval
5. D'Amours S et Montreuil B, (1999) a. Contracted-based tactical planning of a supply chain, centor, Québec.
6. Kalika, M, (2002), Structures d'entreprises, Paris, Economica.
7. Kranton, E. R. et Minehar, D. F. (2000). Networks Versus Vertical integration *Rang Journal of Economics, 31 : 3. 570-601*.
8. O'Farrell. ET wood (1999). Formation of Strategic Alliances in business Services: Towards a New Client-Oriented Conceptual Framework. *Service Industries Journal.* 19 : 1. 133-151.
9. Vers un formalisme d'un système d'informations pour la coordination des activités coopératives : Application aux entreprises réseaux.


GESTION ACTIVITES COOPERATIVES
OK
ALPHA MODELE 1.00
DEVELOPPER MODELE
Cahier de charge
Processus
Autres
Cliquez sur votre choix !
PRECEDENT
PROCESSUS
Processus_1
Processus_2
Processus_n
Cliquez sur votre choix !
PRECEDENT
PROCESSUS_1
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ACTION_1
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Camion iveco 15 tonnes
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