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# 19<sup>th</sup> Bled eConference

#### eValues

Bled, Slovenia, June 5 - 7, 2006

# Comparing Value Propositions with Users' Perceptions to Better Understand the eValues of Electronic Marketplaces

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### Abstract

In this paper, we question the nature and dimensions of eValues. We apply our approach to electronic marketplaces (EMPs), as an illustration of interorganizational information systems. The research is based upon 50 interviews made in 6 EMPs, and a thematic analysis on the themes linked to "the value of EMPs". Our results categorise the different perceptions of eValues according to the different profiles: the value proposition of EMPs' managers and the perceived values of buyer and supplier managers. We highlight that eValue is a key component that helps to distinguish three types of EMP business models: the Buy-type, the Supply-type and the Indus-type. Finally, we discuss the orientation of each business model according to the current value it offers to customers, and conclude that the concept of eValue questions the design of the model of revenue of EMPs.

# 1. Introduction

With the diffusion of Internet Protocol, e-business has spread through the whole international economy and generated new ways of creating value. The question of the type and logic of value creation in e-business is key to competitive advantage (Porter, 1985). However, the understanding of the value cycle in e-business (Osterwalder, Pigneur, 2003) is still at its beginning for a variety of reasons. First, eValue creation implies the participation of a great number of actors who interact one with another through the web. These interactions generate various exchanges, making it difficult to determine the nature and proportion of value added for each actor in the chain. Second, it is difficult to define the type of value that may emerge from e-business in comparison with the traditional economy, and to identify the one that comes from technology and the one that comes from services.

We consider that a first step is needed to be able to describe e-business value creation logic and processes. We should first focus on describing the nature of the value that is created in various specific e-business contexts.

In this paper, we focus on describing the perceived value of electronic marketplaces (EMPs) for buyer and seller organizations. EMPs are intermediaries between buyer and seller organizations that provide IT tools and services through a platform to improve purchasing and supply processes. EMPs are particularly interesting fields of study to learn more on eValues (Gordjin, Akkermans, 2003; Akkerman, Baida et al., 2004) for the following reasons. First, EMPs are created and run by new electronic intermediaries that are still building their business models. For that reason, they are continuously working on improving their value proposition by listening to the market. In other words, these intermediaries constitute an organizational laboratory for studying how business models are evolving. Second, their offer is aimed at improving the buying and supplying processes of their customers. In this perspective, EMPs participate in the general organizational performance. Third, EMPs are organizations that interact in network ties between buyer and seller organizations. For all these reasons, the value perceived by customers appears as a key element to understand the value creation logic.

In this paper, we focus on the following questions: what are the types of eValue generated through EMPs? How can we classify these eValues? How are these eValues perceived according to the different EMPS' actors' profiles?

In the next section, we show that the notion of value has different meanings in management science. With a view to specifying the nature of eValue in EMPs, we distinguish the value proposition of the electronic intermediary from the perceived value of their customers, the buyer and seller organizations. Then, we show the richness of the literature that investigates the nature and components of eValues in diverse e-business contexts. We particularly highlight that the value creation process in e-business seems to reflect a different logic from the linear approach proposed by Porter (1985). We provide elements of description given by the relevant literature and present our taxonomy of EMP business models from which we extracted different actors' perceived value.

In the third section, we present our methodology.

The results are presented in the fourth section. They consist of a presentation of the perceived value by buyer and seller organizations in three different EMP business models: the Buy-EMP, the Supply-EMP and the Indus-EMP. Then we systematically compare the EMP value proposition with the perceived value of their customers. An additional contribution of this paper is to discuss what we learn about eValues from the comparison of these perceptions in terms of the interests served, and on the links between business models and eValues.

# 2. Electronic Marketplaces Perceived Values According to Their Business Models: A Novel Approach to Understanding eValues

### 2.1 The Concept of Value in e-Business

### The notion of value in management studies.

The notion of value is difficult to define in the study of management since each subdiscipline has its own approach. In finance, the value is evaluated through the one provided to stockholders (Charreaux, 1998). In marketing, the value is aimed at the final consumer (Holbrook, 1994). In information systems, the value is generally linked to the level of usefulness of a given technology (Davis, 1989). In a strategic perspective, it refers to the capacity of information systems to provide value to business processes (Soh, Markus, 1995). Finally, strategy highlights the power stakes between those who create the value and those who capture it (Porter, 1985).

Besides, in e-business different actors interact with each other to create value. Hence, it is impossible to measure precisely the value created or added by each actor. Moreover, under the generic term: "value", different types of benefit should be qualified into more details. The literature offers different words linked to the concept of eValue; the value proposition and the perceived value.

### The different meanings of value in e-business context.

In the e-business context, value can be compared to the products' life cycle. Similarly, Osterwalder and Pigneur (2003) define value proposition as the value a firm offers to a specific target customer segment. They distinguish five main steps in modelling value proposition in e-business: value creation, value appropriation, value consumption, value renewal and value transfer. In this paper, we focus on the first step of this cycle, value creation; our aim is to bring out the different types of value created in the e-business context and more specifically in the EMPs' context.

However, value proposition is just one aspect of eValues. Actually, eValue is created through the interaction of many actors; that is why it is interesting to look at the perceptions of each actor to contrast their perceived value of the same phenomenon in an e-business context.

The notion of perceived value is widely used in marketing (Eggert, Ulaga, 2002). This reveals the subjectivity of the definition of what value is according to different actors: Kortge and Okonkwo (1993) see it as the price a customer is willing to pay, what the customer is expecting to find in the final product or service, the level of quality expected, and what is provided through the payment. Zeithaml (1988) defines the perceived value as "*the global evaluation of the utility of a product through the perceptions of what is received, and what is given*". We extend this definition to include the area of services.

With this notion, we wish to show the subjectivity of the different actors interacting in evalue. In addition, we wish to develop a more in-depth description of e-value. Our interest lies also in the opportunity to compare different perceptions of value in the same ebusiness context. In our case, we shall differentiate two types of perception: on the one hand the EMP value proposition that describes a prescribed value to customers; on the other hand, we shall mention the value perceived by EMP customers, buyer and seller organizations. Then, we shall compare the different perceptions in order to describe more precisely EMP's eValue.

# The different types of eValue

We have found two main approaches in the literature around the origin of eValues. On the one hand, some literature emphasizes the role of technology to create eValue. Other literature focuses on intermediation as a way to create eValue to enhance electronic markets efficiency.

### The main benefits gained by technology

The main benefits gained by technology are mentioned by Malone, Benjamin, and Yates (1987). They assert that electronic interconnections will bring three main benefits to markets: electronic communication will accelerate data transportation generating cost reductions; electronic matching will improve sourcing; and electronic integration will facilitate process coupling. In the same vein, Bakos (1997) concludes that IT diffusion in electronic markets will bring price transparency to buyer organizations and increase their knowledge of supplier organizations cost structure. IT will also make it easy to compare

standard offers between different suppliers. Finally, IT will bring cost reductions linked with negotiations and transportation.

In an empirical perspective, Kambil and Van Heck (1998) attribute different IT benefits to electronic auctions; they facilitate supplier identification and price negotiation and they improve the coordination of logistic flows. Moreover, IT increases the richness of data exchanged and brings processes that reinforce regulation control. Hence, IT reduces opportunism risks and provides the capacity to track flows as arguments to avoid conflicts.

On the other hand, eValue seems to be generated by electronic intermediaries. Kaplan and Sawhney (2000) highlight aggregation (the capacity to bring many buyers and sellers under the same roof) and matching as the two main EMPs' eValue. Amit and Zott (2001) focused on asset complementarities (Han, Kauffman, Nault, 2005), innovation synergies, the nature of the participants and the exchanged mechanisms (structure), and finally the governance defined as the interaction rules. Weill and Vitale (2002) synthesize eight value propositions in e-business models: supplier content, goods and services supply, bundle services, matching, asset sharing, integration, virtual community and unique data point of entry to access multiple services. Finally, the e-business literature aimed at EMPs distinguishes two main types of eValue in EMPs: transactional EMPs aimed at executing exchanges and collaborative EMPs aimed at encouraging collaboration between participants (Mahadevan, 2003).

It appears that there are many different nature of eValue in the e-business context but no consensus on its source. eValue is partly made by technology, and partly made by linked services. We can also mention that the term eValue not only refers to operational gains (such as cost reductions) but also include strategic gains (supplier collaboration, actors' governance, power relationships, knowledge management). Finally, eValue appears as key element of e-business models.

# 2.2 Value creation: a key notion to understand the value in e-business models

### Value creation logic in e-business

The logic of value creation in the information age is not well known, but appears to be different from the linear value creation logic illustrated in the value chain developed by Porter (1985). This is the basis for exploring the 'e' of eValue.

Rayport and Sviokla (1995) defend the concept of a virtual value chain based upon the ability of data to leverage value. They mention five main activities to generate eValue: gathering, organizing, selecting, summarizing and distributing data. Norman and Ramirez (1993) propose the concept of 'value constellations' where eValue is generated through actors' interactions into networks. Stabell and Fjeldstad (1998) go further into the description of these propositions. For them, eValue comes essentially from services, based on an infrastructure that allows data security. Coordination between actors is possible through data coupled with process standardisation that facilitates matching and interaction control. Finally, they see intermediaries as taking a club management role defining the rights to access into the network.

### EMP e-Business Models and eValue as key components

e-Business models definitions vary considerably according to the different authors. Here, we define business model as the strategic positioning and the model of revenue of a firm. However it is interesting to notice that in all definitions, the notion of value always takes a particular place in e-Business models components.

Amit and Zott (2001) define the business model as the construct that captures value creation from multiple sources. Afuah and Tucci (2001) focus on the consumer value as a key component of the business model. Other authors mention the value proposition as a key element of business models (Soh, Markus, 2002; Osterwalder, Pigneur, Tucci, 2005). Magretta (2002) mentions that business models are tools aimed at orientating and motivating employees to align themselves on value creation.

To go further in our understanding, we will analyse EMPs' eValue classified in their business models.

### A EMP business model taxonomy

In a previous work (Dominguez, 2005), based on six case studies, we classified EMP business models into three main types. In this paper, we shall use this taxonomy to represent the different types of eValue in each business model.

First, the **Buy-EMP** business model consists of tools and services mainly dedicated to the purchasing process; one of the best known being electronic auctions. These are mainly playing on intensive competition between buyer and seller organizations to leverage eValue for buyer organizations.

Second, the **Supply-EMP** business model consists of tools and services mainly dedicated to the supply process; one of the best known being electronic catalogues. Their objective is mainly to provide efficient inter-organizational communication on the basis of data standardisation and integration, notably for indirect goods and services.

Third, the **Indus-EMP** business model consists of tools and services in the whole exchange process. Contrary to the previous EMP types, Indus-EMP focuses on one customer target positioned in a specific industry or activity type. Its value proposition highlights collaboration as a main eValue area.

# 3. Methodology

Our method is based on 6 case studies made between 2000-2005, conducting 150 interviews with three types of actor: EMP organization, buyer and seller organizations with IS, Purchasing, and Supply Chain managers, and CEOs. The EMPs were in different types of industry, with diverse strategic positioning, to represent the diversity of the landscape. These interviews were used to write case studies in which three main EMP business models emerged from the field.

To provide a greater degree of granularity of EMP eValue understanding, we selected 50 interviews according to different criteria: representativeness of each business model (17 in Buy-EMP, 12 in Supply-EMP and 21 in Indus-EMP), representativeness of each profile (22 with EMP managers, 18 with Buyers, 10 with Suppliers), and interviews selected in different periods of time from 2000 to 2005 to follow the evolution of each business model eValues dimensions, richness of each interview. These interviews were transcribed to conduct a thematic analysis on eValue. Our aim was to describe more precisely the nature of EMP value. To do so, we codified each verbatim record, each group of words (one sentence, many sentences or paragraphs) that makes sense around the theme "the value of EMPs". After that, we classified themes encountered with the help of the literature review into twelve dimensions that describe the nature of EMP perceived value (See Table 1).

Finally, we constructed diagrams to represent the proportion of each dimension of EMP perceived value according to each business model and actor profile (EMP manager, Buyer or Seller organization.) To do this, we weighted the number of codes for each profile according to the total number of pages transcribed. Hence, in each diagram, the X-axis shows each dimension of the twelve EMPs types of eValue seen by the three actors'

profiles1, while the Y-axis shows the number of codes for each profile in each eValue dimension.

These schemes offer the opportunity to make interesting comparisons between the different actor profiles and associated perceptions of business models eValue.

# 4. EMP eValue Perceived

In the following section, we sum up into twelve dimensions the different types of value mentioned in the e-business context in the literature.

### 4.1 Types of eValue in EMPs Synthesized in 12 Dimensions

An initial step of the thematic analysis was to categorise codes related to 'eValue in EMPs'. To do this, we propose a synthesis of these eValues themes into twelve dimensions that emerged both from the field and the review of literature. In Table 1 we summarise the different codes and authors linked with each dimension. In the following section, we will only discuss the first three eValue dimensions of each business model according to the number of codes cited by interviewees, and according to each actor's profile. We will first comment on the EMP's value propositions and then discuss eValue dimensions perceived by Buyer and Supplier organizations. Finally, we will compare these three different perceptions to highlight the main differences and similarities.

<sup>1</sup> VP = Value Proposition of the EMP.

AV-B = Value added perceived by the Buyer organization.

AV-S = Value added perceived by the Supplier organization.

EMP Perceived Value dimensions	Codes	Authors
1. Development and maintenance application (Edition)	<ul> <li>Capacity to develop and maintain applications independently from generalist editors (SAP, IBM)</li> </ul>	Chircu, Kauffman (1999) Weill, Vitale (2002)
2. Infrastructure	<ul> <li>Technological solidity infrastructure</li> <li>Flexibility to outsource EMP tools</li> <li>Security</li> <li>Storage, data routing</li> <li>Unique entering data point</li> </ul>	Baile, Trahand (1999) ; Amit, Zott (2001) Weill, Vitale (2002) Kumar, Van Dissel (1996) Sarkar et al. (1995) ; Mahadevan (2003)
3. Data	<ul> <li>Standardisation</li> <li>Quality via synchronisation</li> <li>Classification</li> <li>Centralisation</li> </ul>	Johnston, Vitale (1988)
4. Matching	<ul><li>EMP Sourcing improvements</li><li>Low Cost Country Sourcing</li></ul>	Malone et al. (1997) Kaplan, Sawhney (2000) Kambil, Van Heck (1998) Carter et al. (2000)
5. Supplier Relationship Management	<ul> <li>Supplier registration, tool training</li> <li>Communication coordination with suppliers</li> <li>Rationalisation of supplier databases</li> <li>Rise of supplier competition</li> <li>Avoiding maverick buying</li> <li>To facilitate collaboration</li> <li>Physical audit of supplier organizations</li> </ul>	Clemons, Row (1992) Carter et al. (2000) Kambil, Van Heck (1998) Soh , Markus (2002) Mahadevan (2003) Sarkar et al. (1995)
6. Price effect2	<ul> <li>Price reduction for buying organizations</li> <li>Aggregation of volumes</li> <li>Price market indicator</li> </ul>	Bakos (1997) Kauffman, Wang (2001)
7. Communication process	<ul> <li>Buying and supplying process standardisation, reengineering</li> <li>Communication improvements</li> <li>Multiples languages into the platform</li> <li>EMP worldwide services</li> </ul>	Johnston, Vitale (1988) Hammer, Champy (1993)

Table 1: eValue dimensions of EMPs taken from the literature and the results of the thematic analysis.

<sup>2</sup> The price effect (Dominguez, 2005) consists of a price reduction obtained for the buyer organization in comparison with historical prices through auctions.

8. Change accelerator	<ul><li>Exchanges time-reduction gains</li><li>Change and adoption services</li><li>EMP as a trusted partner</li></ul>	Venkatesh et al. (2003) Bailey, Bakos (1997) Allen (2000)
9. Integration	<ul> <li>EMP internal integration</li> <li>External integration between EMP platform and IS customers</li> </ul>	Timmers (1998) Malone et al. (1997) Konsynski (1993)
10. Reporting and purchasing expertise	<ul> <li>Purchasing expertise service</li> <li>Purchasing reporting and visibility gains</li> <li>Knowledge management</li> <li>Supplier cost structure visibility gains</li> <li>Purchasing decision support</li> <li>Buyer trade change support</li> </ul>	Bakos (1997) Sarkar et al. (1995) Carter et al. (2002)
11. Economic gains	<ul> <li>Transaction cost reduction</li> <li>Risks reduction</li> <li>Resources sharing : material (platform and tools) and immaterial (knowledge)</li> <li>Error –mistakes reduction</li> <li>Bundle services</li> <li>Gains implementation support</li> <li>Productivity</li> <li>Competitive gains</li> <li>Complexity outsourcing</li> </ul>	Malone et al. (1997) Williamson (1994) Brousseau (2002) Bailey, Bakos (1997) Brousseau (2002) Suomi (1991) Fimbel (2003)
12. Political gains	<ul> <li>Internal : purchasing behaviour control, expenses visibility</li> <li>External: data asymmetry cost reduction, size gains to negotiate communication standards.</li> </ul>	Bakos (1991) Chircu, Kauffman (1999)



4.2 Types of eValue in the Buy-EMP Business Model

Figure 1: eValues perceived in the Buy-EMP business model

There are three main dimensions that characterize the Buy-EMP value proposition. First, Buy-EMP is seen as an accelerator in the adoption of IT owing to the services delivered; it is also seen as a change management supporting partner. Second, purchasing expertise of the EMP is presented as one of the key forces; this is reinforced by reporting services provided by IT tools. Reporting provides a larger visibility on what is spent in a whole group upstream the exchange process that is to say before management accountancy. Third, economic gains are mentioned. These are based upon supplier-risk reduction for buyer organizations, cost reductions due to the standardisation of the purchasing process, the opportunity to outsource some purchasing responsibilities, the opportunity to share resources, the opportunity to negotiate with higher volumes and the increased buyers' productivity.

Buyer perceptions partly align with the Buy-EMP value proposition. They both consider the role of the EMP as an accelerator in change management and adoption, and economic gains are mainly due to the standardisation of the purchasing process. The third dimension mentioned is purchasing expertise and reporting. The fourth main value perceived by buyer organizations is the price effect: it ranges from 5% to more than 50%, associated with increased competition between suppliers and with the mechanical auction tool.

The first thing to notice concerning supplier organizations' value perceived is that they generally mention fewer codes than buyer organizations. Supplier organizations agree with the EMP value proposition in its role in change management and adoption owing to the training provided to supplier organizations. Actually, the first dimension mentioned by supplier organizations is matching, as suppliers hope to use the EMP to find new customers and thus market share.

The contrast between different perspectives shows that Buy-EMP is seen as a change accelerator by all actors. Another interesting point is the price effect; it is one of the main eValue dimension for buyer organizations but it is much less emphasized by EMPs. We interpret this discrepancy as being due to the sensitive nature of this element of value brought to buyer organizations. Actually, proponents of Buy-EMPs appear to deny the

importance of the price effect as a form of value for buyer organizations, in order to avoid providing supplier organizations with arguments that could question their participation into the EMP platform.

Second, the total number of codes linked with the different dimensions clearly confirms that the Buy-EMP model appears in favour of buyer organizations.

Third, the reporting and purchasing expertise is of interest because, according to the number of codes mentioned, it is the most cited one; hence this eValue dimension distinguishes this model from the other ones. Moreover, this dimension is mentioned for different reasons according to each profile: EMPs stress the orientation of their service towards purchasing knowledge management while buyer organizations emphasize the reporting services and supplier organizations seem only to benefit from the training of auctioning to adapt their strategy to these tools. Hence, the perspective for buyer organizations is larger than the operational one offered to supplier organizations, as it includes the promise of a better control on purchasing information in their information systems.

To summarise, the Buy-EMP model is clearly positioned in the purchasing process. eValue linked to this business model lies in accelerating change and facilitating IT tools adoption, purchasing expertise and reporting services, and economic gains. This business model is clearly oriented to the satisfaction of Buyer organizations needs.

### 4.3 eValues in the Supply-EMP Business Model

Three main dimensions characterize the Supply-EMP value proposition. First, the Supply-EMP is oriented to the improvement of the communication process between buyer and supplier organizations through secure infrastructure and the standardisation of processes and data. Second, the value proposition is aimed at data quality improvements and standardisation. Third, the value proposition lies in economic gains for its customers.



Figure 2: eValues perceived in the Supply-EMP business model

The perceived values of buyer organizations partly align with the presentation of the value proposition of this model. They consider the Supply-EMP as a way to improve their communication with their supplier organizations. However the use of this EMP is limited to transactional exchanges and cannot be used to conduct negotiations. The second dimension is the benefits for supplier relationship management. These relate mainly to the capacity to enhance competition through the selection of supplier organizations with whom long-term contracts are concluded in electronic catalogues but also on an increased control on prices and cost reductions by avoiding maverick buying. The third dimension, reporting and purchasing expertise, refers to the visibility given by reporting tools to the level of expenses in a multiple site group.

In this model too, supplier organizations perceive less quantity of eValue than buyer organizations in terms of number of codes. The main eValue dimensions mentioned are economic gains, consisting mainly of transaction cost and error reductions due to the standardisation of the supply process but also on the sharing of resources through the platform. The second eValue mentioned is integration: integration between supplier IS and the EMP appears to be a key argument to convince supplier to participate in these EMPs. Finally, as for buyer organizations, the third most important value for supplier organizations is the improvement of the communication process.

The comparison of different perspectives shows that Supply-EMP is principally used to improve business communication owing to the standardisation of the process. However, the eValue brought by the Supply-EMP is not neutral on the buyer-seller relationship as it provides buyer organizations with increased control. Actually, the Supply-EMP provides tools to increase the competition between supplier organizations that have the size to serve larger markets. Further, some economic gains are due to the sharing of material resources (e.g. software, platforms) but yet no sourcing information is shared between buyer organizations.

All in all, the Supply-EMP model is clearly positioned in the supply process. eValue linked to this model is the improvement of the communication process. This business model is also mainly oriented to the satisfaction of buyer organizations needs.



### 4.4 eValues in the Indus-EMP business model

Figure 3: eValues perceived in the Indus-EMP business model

Three main dimensions that characterize the Indus-EMP value proposition. First, in common with the Supply-EMP, the improvement of the communication process appears as the main benefit. Second, economic gains due to sharing of resources are mentioned. Third, and similarly to the Buy-EMP, the Indus-EMP is seen as a change accelerator.

In terms of perceived value, buyer organizations first mention economic gains. These gains, as seen in previous models, are due to standardisation of processes, sharing of resources and reduction of errors and transaction costs. The second element of eValue is data quality improvement. This eValue appears as a long-term one with international projects of data synchronisation between trading partners in a whole industry. Finally, buyer organizations agree with the presentation of the value proposition with the improvement of the communication process.

As mentioned earlier, the quantity of eValue perceived by supplier organizations is lower than that mentioned in Buy and Supply-EMP business models. Similarly to buyer organizations and EMPs, supplier organizations first identify economic gains. Second, they mention data quality improvements as a long-term objective. Third, and similarly to the Supply-EMP, they mention integration as a key eValue provided by Indus-EMP business model.

Comparisons of different perspectives show that eValue dimensions are nearly the same as in the previous models. This is due to the Indus-EMP strategic positioning both on purchasing and the supply chain. Actually, the only eValue dimension that differentiates this model from the others is the political gains. Three main political gains are mentioned: first, EMPs offer the opportunity to fight against other EMPs in the same industry; second the Indus-EMP appears as a way to gain power in the international business and IT standards negotiation dedicated to the same industry; third the Indus-EMP offers its customers the capacity to find supplier organizations able to serve international markets.

Another key element to mention is the different approach on eValue orientations. In Buy and Supply-EMPs, eValue is mainly mentioned in a cost reduction perspective (Williamson, 1994) whereas in the Indus-EMP model, eValue is mentioned in a value creation perspective. For instance, the Indus-EMP tries to favour collaborative relationships.

# 5. Discussion

In this section, we discuss two main issues linked to eValue. First, we ask how far a better understanding of the types of value brought by EMPs can help us to make predictions on the orientation of their business model, and more precisely on their strategic positioning. Second, we question the links between the type and level of value brought by the EMP and the financial contribution of each participant.

Our results confirm that the description of the nature of eValues generated in EMPs is a key dimension to differentiate business models design and orientations (Amit, Zott, 2001; Magretta, 2002). We also conclude that key EMPs' eValues define their core competence, and that they should be considered as a good predictors of the evolution of their business models.

The Buy-EMP main eValue lies in change accelerator, purchasing expertise and economic gains. A potential orientation of this business model could be the exploitation of the purchasing knowledge management for Buyer organizations which would improve visibility in their purchasing IS, or track more precisely Supplier performance in the same perspective as rating companies.

The Supply-EMP main eValue lies in the improvement of communication processes during exchanges. The orientation of this business model seems to be similar to Value

Added Networks' (VAN) services with a value directed to a secure and standard communication. A potential orientation of this model could also concern the management of physical flows of goods and services with logistics services linked to electronic catalogues.

The Indus-EMP main eValue lies in the improvement of the communication process and data quality. The perspective of this business model is more fuzzy as Indus-EMPs neither have an expertise in Purchasing or in the Supply chain. A potential orientation of this business model probably lies in the capacity of the EMP to provide political gains to its customers. The nature of these political gains needs to be further described.

eValue perceived provides elements to discuss the articulation between the level of value brought by the EMP to its customers and its model of revenue (Zeithaml, 1988). During the period 2000-2005, we observed that the majority of EMPs financed their model owing to Buyer organizations and it is still the case today. Today, Buyer organizations would like to reduce their participation in EMPs. Hence, the only alternative for EMPs is to convince Supplier organizations that they provide them with sufficient value to justify an increased financial participation in their revenue.

Actually, EMPs are in a double constraint. On the one hand, they have to attract Supplier organizations because they need them to reach a sufficient size to be able to make regular transactions and to create value generated through collective interactions. On the other hand, EMPs have to survive in the future. To do so, they will have to compensate the reduction of financial participation of Buyer organizations with other participants, one of them being Supplier organizations.

# 6. Conclusion

In this paper, we focus on an in-depth description of the types of eValue brought by EMPs to their customers according to each of the three business models presented.

Our contribution to this question is a better understanding of EMP business models through the different types of eValue brought to their customers. The results are based upon a rich empirical data from interviews that were codified. Another contribution of the paper is to highlight the main eValue dimensions linked to each EMP business model. We believe that these main eValues are good predictors of the evolution of their business models. Finally, we highlight the fact that the survival of EMPs will depend on their capacity to run over the model of revenue issue. One solution, it is suggested, is to propose a contribution aligned on the level of value brought to Buyer and Supplier organizations (Afuah, Tucci, 2001). This suggests the need to propose a way to evaluate the contribution of each actor in the chain; this is a difficult challenge as types of eValue appear to be a mixed contribution of different actors in the chain (Blankenburg et al., 1999). One limitation of this research is that we have not been able to distinguish the type of eValue brought by technology and the one brought by the intermediary (Malone et al, 1987; Weill, Vitale, 20020. In the same way as Osterwalder, Pigneur and Tucci (2005), we are looking for ways of regrouping EMPs eValues dimensions with a view to reach an eValue typology of e-business models. In these dimensions we think that services will have a main growth potential.

We conclude that gaining a better understanding of the types of eValue generated in ebusiness context is a first step to a better understanding of business models and value creation logic. We observed that EMPs business models are globally positioned in a transactional eValue perspective (Mahadevan, 2003): the Buy-EMP business model bring value owing the increased competition between suppliers that have to fight with new electronic tools whereas the Supply-EMP business model brings value with their capacity to secure data transportation with their electronic information systems. Finally, the IndusEMP main value is probably not due to technology but more on the aggregation and matching effects (Kaplan, Sawhney, 2000) that provide an increased power to buyers. To conclude, we suggest that the next challenge for EMPs will be to renew their value proposition by being able to bring collaboration between participants that can be direct competitors.

Further research would include two areas. First, it seems interesting to complete the description of the dimensions of eValue in EMPs with the elements of risks generated by EMPs. Second, the question of the articulation between the level of value brought to each participant and the model of revenue of EMPs need further developments.

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