

CHANGING ECONOMIC MODEL : WHAT CONSEQUENCES FOR BUSINESS MODEL ?

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Abstract

Along with the critics addressed to the industrial economic model (Du Tertre 2009), new economic models inspired by a more servicial way of thinking emerge. These new economic models, such as Functional and Cooperative Economy (FCE) seems to be more relevant regarding sustainable development (Benqué, du Tertre and Vuidel 2014).

When an enterprise chooses to take the path toward a service-based economic model, it means changes in the way the enterprise is organised, in the way value is created and the way the value produced is then transformed into monetary flux. Those changes take the form of new kind of relationship between producers and

clients whose are closely cooperating. This means new kind of contracts and new invoicing practices. The units chosen to summarize the company offers should change as well.

Contractual issues and invoicing practices are two important dimension in companies' business models. We make a distinction in this paper between economic model – dealing with the way value is created – and business model – the way value is changed into monetary flux (Gaglio, Lauriol and du Tertre 2011). An enterprise engaged in a path toward new economic model should face tension about its business model as well.

The contribution would propose an analysis of the links between economic model shifting and business model evolution through business cases studies.

Keywords (up to 5)

New Economic Model, Business Model, Invoicing, Evaluation, Functional and Cooperative Economy

Introduction

The socioeconomic environment has met some deep changes in the 20th century's last decades and the 21st century first one. Structural economic changes leading to enterprises economic model shifting issues have been identified by some authors from human and social sciences. Among them, Christian du Tertre identifies four main changes (du Tertre 2009; 2013). First, the technological and digital innovations have changed the way labour is organized, spatially and temporally. Another structural change lies in the transition from an economic dynamic led by industry toward a dynamic led by services. In addition, the services development is simultaneous with the predominance taken by immaterial and relational aspects into activities, notices du Tertre. Therefore, non-tangible and non-measurable effects resulting from those relational and immaterial activities are getting central in today's economy. At last, environmental and social issues are now well known. This calls for new growth models and sustainable development as defined in the Bruntland report (1987). The French economist concludes that all these structural changes should lead to rethink the conceptual framework inherited from the industrial age to develop a servicial and cooperative one.

Mainly, Enterprises' economic models are still based on the industrial way of thinking, no matter their activities. We have to introduce a difference between tertiarization and servicialization following François Hubault (2013). Tertiarization refers to the way activities are listed in traditional activities' classification – agriculture and extraction; manufacturing; and services). Servicialization deal with the specific changes in value creation process induced by the development of relational and immaterial aspects into activities. So, there are some enterprises from the manufacturing sector in which we do observe a servicial logic in action. On the other hand, there are enterprises from the tertiary sector in which the industrial logic is the main reference. We will present some cases showing that remarkably in this article. According to the logic inspiring the enterprises' manager, the economic performance conception changes as well.

Classically, the industrial way of thinking considers performance as a sequence made of quality, productivity, and profitability. Quality is though as a stable dimension. It corresponds to measurable and countable dimensions of the production, even if the production does not result in a good but in a service. In that case, the quality takes the form of the material support of service or measurable aspect of the service done – time spend, amount of contacts, amount of operations done, ... This focus on countable aspects of the production meet the idea of matching rules between human workforce and the machines. So, with a standard quality, any enterprise director should be able to find tasks that might be automatized and clearly evaluate the value creation process efficiency. The quality supposed stability makes the work division by task possible. The clear identification of the result allows directors to think of productivity relying on three king of lever: scales economies, labour intensification and technical improvements. If a productive unit's director is good enough in the quest for productivity, then profitability should develop.

This economic model has shown its efficiency for the years following World War II in France. But in the late 1960's it started to lost some of its relevance. In 1970's it reaches its limits because of market saturation for amenities such as cars or domestic electricals. Consequentially, the sequence quality, productivity and profitability have been turned upside down by the financialization phenomena. This phenomena refers to a process linking two dimensions: first the increasing of the non-banking financing in the economy; second, the subsequent leadership taken by financial motives in companies' strategy (Bourguinat 2006; su Tertre 2005 & 2009). It means that profitability rate is now the first reference for the

production planners. Investors determine the expected profitability rate. To reach that amount of profitability, production units' directors have to find ways to increase productivity. Then, quality is seen as a residue. In a saturated market, low quality means the capacity to assume low prices, allowing the market growth for a moment. But quickly it leads to an over competitive situation, in which prices are the main weapon. This has led a lot of enterprises in a pathway leading to a dead end. In that situation, sustainability is radically against the enterprise trajectory.

For the developing immaterial and relational activities, the tension is even higher because of the activities' nature itself. In these activities, beneficiaries enter production processes, bringing in non-manageable sources of dictate. They also bring their subjectivity in, making each service singular. The relational aspect of these activities also results in involving the workers' subjectivity. All this make the value creation process more complex and less predictable. The subjective commitment rises and the temporal aspects of labour change toward something harder to count, indeed uncountable (Dejours 2015).

The traditional approach considering an homogenous, divisible, and objectively measurable worktime is not relevant for such activities. The worktime cannot be the reference for value creation measure anymore. Multiple effects of this lack of relevance from the industrial conceptual framework and its practical translations can be identified today. Economically speaking, it leads to dysfunctions, low quality, value destruction, and an incapacity to summarize the value created. In social and health terms, it causes new labour pathologies as musculoskeletal problems and psychosocial troubles as burn out. Induced sides effects, known as *externalities* are not considered in the industrial model (du Tertre 2005; 2006; 2009). Those *externalities* can't last any longer, regarding to nowadays knowledge about global warming and other environmental issues. All this make the authors getting to the conclusion that the industrial model is in a dead end (du Tertre 2013; Benké, Vuidel & du Tertre 2014; Dejours 2015; Demissy & Kniaz 2016; Vuidel 2016)

From this assessment, new economic models inspired by a more servicial way of thinking emerge. These new economic models, such as Functional and Cooperative Economy (FCE) seems to be more relevant regarding sustainable development (Benqué, du Tertre and Vuidel 2014). When an enterprise engages itself toward a service-based economic model, it means several changes in the way the enterprise is organised, in the way value is created and the way the value produced is then transformed into monetary flux. First the quality cannot be

considered as stable and foreseen dimension anymore. In servicial activities, the quality does not lie in the result of the service, but also in the production process. In addition, quality is co-created with the beneficiary. This means that the quality depends on his commitment in the process. So, the resources mobilized in the production include the beneficiary ones. In such activities, productivity is not a matter of scale anymore, nor a matter of labor intensification or a question of technical innovation. Trust helps getting more productive, as the capacity to adapt to the beneficiary or the capacity to find complementary skills according to the situation. As a result, productivity is based on responsiveness and flexibility; relevant goods and services association; skills complementation; and adoption economies resulting from the *“stability if the links with the beneficiary”* (Benké, Vuidel and du Tertre 2014).

Those changes take the form of new kind of relationship between producers and clients whose are closely cooperating. This means new kind of contracts and new invoicing practices. It also means new displays to evaluate the relation's production. The evaluation should not only take account of the result, but also of the effects generated along the whole production process. This evaluation should consider the externalities, and the effects on the people involved as a part of the overall performance. With these evaluation changes, the units chosen to summarize the company offers must change as well. Contractual issues and invoicing practices are two important dimension in companies' business models. We make a distinction in this paper between economic model – dealing with the way value is created – and business model – the way value is changed into monetary flux (Gaglio, Lauriol and du Tertre 2011). An enterprise engaged in a path toward new economic model should face tension about its business model as well.

To investigate these questions, we will expose enterprises experimenting an economic model shift. These enterprises have been accompanied by ATEMIS and more specifically by both the authors on their pathway toward a new economic model. For each case, we will expose the kind of change in which these enterprises are engaged, and the difficulties they are facing in terms of new business model building. We will develop two business cases here. The first one is cleanliness French enterprises. This sector has developed a deeply industrial conception of its activities which appears in these enterprises organization, evaluation process and business model. In practice, these activities are getting more servicial, and rely on a real-time cooperation between producers and beneficiaries. The second

business case refers to an enterprise from the French Hauts-de-France region. This enterprise first was a medical call center. It progressively changes its relations with general practitioners toward a health prevention service. The pathway toward a new economic model continues toward a local medical desertification prevention service. Those changes are questioning this company, especially about the kind of contract it can propose and the business model it could refer to.

1. From the industrial model to the servicial model: what new business model for cleanliness enterprises ?

In France, the cleanliness sector first enterprises was founded in the 19th century. They were developed to support industrial activities as production plants, upkeep activities or harbour activities. This emerging sector has grown fast from the 1970's and the externalization phenomena affecting industrial activities in that period. Since then, the sector was developing continuously. Nonetheless, since ten years, the sector is facing economic and social issues. The cleanliness activities suffer from a negative representation (Hughes 1996), and endure difficulties to enhance the value of their production. The customers are constantly pressuring to get prices as low as possible. Margins get lower and lower consequently since 2007 – 4.2% in 2007, 2.6% in 2012). Prices tend to be the main purpose in the competition on cleanliness market. At the same time, the work organisation and the underlying economic stakes are producing several social unwanted effects – part time jobs, out of sync worktime, tiresome labour, lack of acknowledgement, lack of social enhancement, ... In addition, the service is not fully satisfying the customers.

Facing these difficulties, some enterprises in this sector have started to change the way they organize their service and workforce. This change s open new economic possibilities calling for new kind of contract, of invoicing and evaluation practices.

1.1 Cleaning; a service thought in an industrial way.

Even if in France, Cleaning is classified as a service, it is mainly though and organized as an industry. The activity's result is thought as the absence of dust or some material removal. Secondly, the technical aspects of the service is the only aspect considered. The service is defined as an amount of square meters to clean,

a frequency of cleaning and a price by hour. In this sector, performance is thought as in the classical industrial way, by a sequence of quality – productivity – profitability. The quality is considered as something objective and reproducible from a client to another. This means that the offer may always fit into the same specification bill, no matter the client. Productivity mainly relies on labour intensification. A certain rate of square meters cleaned by hour must be reached to get some profitability. Increasing the amount of square meters cleaned per unit of time is seen as a sign of performance. Time is the central reference in the performance approach. This is a striking dimension from the industrial model greatly influencing the way contracts are built (Le Dilosquer & De Gasparo 2017). Effectively, in that sector, enterprises transform value into money by selling, not an amount of goods, but of cleaning time understood quite as a good.

In addition, since the externalization phenomena in the 1980's, the cleaning services took place in displaced times from the customers' activity. The cleaning work is done very early in the morning or very late in the evening. This contribute to build a separation between production time and consumption time as it is in the industrial activities. It also creates social *externalities* for the workers – family time or health issues for example.

1.2 When cleaning in co-activity brings some changes.

For ten years now, some enterprises from cleanliness sector have adopted a new temporal organization to avoid some of the negative consequences exposed here. They first tried to develop cleaning intervention in daytime, to reduce the amount of part time jobs. This change appears to be more than a working time change. Cleaning in daytime means that the beneficiary is here, opening the possibility for a relational service. The nature of the service itself changes because of the subjective commitment, the cooperation with the customer's worker and the arbitration needed between every kind of prescription resulting of the co-presence. From all this, the point is not to intervene in an inert environment to clean furniture and floor areas anymore, but to intervene into singular and unpredictable situations.

The traditional economic concepts are unsettled by this activity based on relation. Productivity cannot be reduced to the optimization of a relation between time and surface. In co-activity, the cleanliness agent must deal with the workers' different uses of the place. The agent should consider the customer's workers' habits. Knowing these habits allows him/her to adapt his intervention to get more

efficient and more relevant. Adoption economies supplant scales economies. Time/space ratio is not relevant anymore.

Though this example of cleanliness sector, we see how the activity changes. We do understand the emerging difference in the way value is created into the co-activity situation. But if the activity business model is still strongly inspired by industrial logic then, those changes are not acknowledged which may cause *externalities* and may lead to more difficulty for workers.

1.3 Toward a new business model

In French cleanliness sector, displays are getting set to accompany the enterprises evolution toward a more servicial activity. The dynamics meet difficulties about contract conception and invoicing. The point is to find an alternative to contracts based on selling an amount of technical work expressed in hours. The aim is to find a way to allow agreement between stakeholders about the value effectively created. Some of the enterprises we have accompanied have experienced new practices with their clients. The first thing they have done was to plan time with their customer to build a specification bill as close as possible to the building users' expectations. The result of this is an agreement on what is cleanliness adapted to a specific workplace and the specific uses of this workplace. To do so, the joint contractors build up a hierarchization of the actions to be taken rather than a list of tasks. It results in a new specification bill defining the performance to reach, adapted to the workplace uses and not in an amount of hours calculated from standardized criteria.

Labour evaluation displays are also questioned in those experiments. In the industrial model, labour evaluation is based on compliance controls. In these controls, the point is to measure the gap between the obtained result and the forecast result. In case of a gap, the contract plans financial sanctions. In the experiment, evaluation have two main objectives: professionalization and innovation. The performance agreement forecasts the overtaking of prescription. Therefore, the point is not to check the compliance anymore, but to check the relevance of the intervention. This relevance cannot be totally forecasted. This means that evaluation times are occasions to improve the arbitrations done by the cleanliness agent to answer a specific situation. Doing so helps the agent in their capacity to act in cooperation with the beneficiaries in situation. In other words, the evaluation time improve the agent's proficiency. In the same time, the evaluation process reveal some of the customer's expectation which were

unthought in the performance agreement. These lacks may be corrected and then reintroduced in the cleanliness companies' offer.

2. From the industrial call center to an ecosystem struggling against local medical desertification

In France, general practitioners often work alone in their own office. They were used to deal with their agenda management by themselves or by employing a medical secretary. Like the cleanliness sector, the medical secretary work has been externalised in the past 20 years. Digital technologies have allowed new actors to deal with incoming calls from the patients and organizing the doctors' agenda. In that quite new activity, an industrial logic quickly dominates. The doctors seemed not willing to pay much attention to the quality of the service as long as their agenda got full enough. On the offer side, the pioneers on this market search to offer the lowest price by call and build a strategy base on a volume growth. Years later, the race toward the lowest cost have led those enterprises abroad. Patient started to complain about the quality of the answers they have got to their phone calls. They mainly complain to the doctors about the fact that the persons answering seems to not be able to deal with anything else than giving a rendezvous, when they are expecting medical advices or just somebody that listen to them. On the general practitioners' side, health issues started to mount seriously. These issues were the result of the growing lack of doctors in some places, because of their rarity, or the growing need in the most populated areas.

In that context, a company from the French Hauts-de-France region was seeking for an alternative to the industrial model. The owner did not resign himself to leave France to find workforce at a lower price. He decided to search for a solution based on a new relationship with the practitioners. In 2012, after an accompaniment in his pathway toward functional and cooperative economy (FCE), he started to build up a new offer. Building this offer had two main consequences: First he had to imagine a new way to make his invoices; second, his service attracts local governments improving the purpose of the solution.

2.1 From selling an amount of calls toward health prevention and qualitative answers.

In the industrial perspective, this enterprise was selling an amount of calls dealt with. Basically, when a patient wanted to get a rendezvous, he/she calls the company which check the doctor's agenda and fills it with the requested rendezvous. The more the company filled the doctor's agenda, the more it earns money. From time to time, the company's workers noticed that some doctors do not fulfil their rendezvous. Other were said to be unpleasant with their patient. All complains were getting to the company who has no way to deal with it.

Facing this, the company owner decided to experiment a new value offer toward some practitioners. He asked them about their main problem and expectations. Most of them worried about the lack of time to rest. The company soon proposed a solution to reduce practitioners' activity when some signs of overwork are detected. To do so, the company have to deal with some of the patients' questions. The enterprise should also propose to the patient to meet another practitioner less occupied in the same area. By this solution, the company succeed in selling something else than an amount of calls dealt with. The problem is that something appears to be more complex to identify and understand.

A part of it was health issues prevention for the practitioners. As this effect could be obtained by limiting the amount of rendezvous taken, it cannot be paid on the same basis as before. Moreover, a part of the solution is to make some of the rendezvous shift to another doctor. Invoicing the rendezvous effectively taken would have meant reducing the cost to the one benefiting of the solution and rising it for the one who is helping! Another part of the solution is to deal directly with some of the patients calls, which means reducing the amount of rendezvous. At last, to get the performance, the company's worker must spend more time on the phone to decide if they can deal with the demand or if it could be taken by any doctor, or if the patient must have a rendezvous with his/her doctor.

In the former service, invoicing was quite easy. The company just have to count the amount of rendezvous taken. Nowadays, the company have to evaluate the quality of the service to determine how worth it is for each practitioner. As a result, two directions have been taken to invoice this service. The first one is to continue to count the amount of rendezvous with an higher price per unit because the doctors acknowledge the value of the service even if they can't give it a price. The other solution is to create a fix monthly payment satisfying the company and the doctor and allowing the company to continue its efforts to prevent doctors overwork situations.

2.2 From an individual solution to a territorial policy to struggle against medical desertification.

The company's capacity to take care of the doctors' overwork issues, quickly had a positive side effect: some retiring doctors advised the new comers replacing them to use the service. This positive sign paired up with a change in general practitioners' general expectation. The retiring doctors gave a big part of their personal time for their professional activity. The new generation of general practitioners seem to pay more attention at the balance between their professional and their personal life. The company started to imagine solutions to help new doctors' installation, by helping them getting patients from overworked doctors, and keeping the precious balance between professional and personal times. This solution soon attracts the local governments' attention. Indeed, the French Hauts-de-France region, as other region in France, suffers from medical desertification in several areas. Some of the local government started to call the company to get some help to attract doctors.

To do so, the company had to rely on its good relationship with the doctors' professional organization (French medical association) within the region. The company was already working with some replacement doctors. An agreement was found to help those replacement doctors to locate in places where medical presence is needed. The result is the possibility to get replacement doctors in an area to prevent a local doctor's overwork situation. Doing so, it also brings new access to medical services to inhabitants. At last, it gives to replacement doctors an occasion to test locations in areas needing them, right now or a bit later. The result is that some of these doctors effectively decided to locate in the places where they had the occasion to work in.

The uprising question interesting us here is: who should pay for this solution? The fact is, several actors do benefit of the solution. How the company should conceive its new business model for this solution? Is it still a matter of business ?

2.3 From a business model to an ecosystem financing.

When this medical call centre changes to a solution carrier for practitioner and local governments, the actors' system got more complex too. Meanwhile, the economic model gets more complex too. The industrial way seems particularly irrelevant for the new solution as the main effect result in avoiding health issues and creating attractiveness for territory by reducing the amount of rendezvous

taken by doctors. Those two main effects are particularly difficult to forecast and uncountable. Creating a new convention about how a monetary retribution should be addressed to the solution carrier do not seem to be a business model question anymore. It rather seems to be a question of financing a territorial solution, a territorial ecosystem.

In terms of contract, this solution calls for a multilateral contract including at least the local government, the doctors and the solution carrier. As an health prevention service, the solution might also interest the French Social Security System. The problem that emerges from now is that each actor has their own logic and their own temporality. This solution would need time to get built. The company is now working to get all the ecosystem together which means spending a lot of time explaining how the solution works and revealing the potential value it could bring to the local population. Out of the solution conception issues, there is another task particularly complex to deal with for the company owner: this enterprise is creating a new profession, radically different from the call centre one. Developing the new solution would mean getting the whole team ready.

Conclusion

In both situations, we have seen how getting into a more servicial economic model leads to important changes in the business model. We also notice that putting some distance with the industrial references do not solve the question. In fact, it just open wide the question of new invoicing and contracting practices. In both cases, the instruction of the new business model goes through a deeper cooperation with the former customer and partner about the service conception and its evaluation. The conception and evaluation processes themselves are supposed to changes deeply. Evaluation is not meant to stand a compliance test as conception is not finishing when the service started. Evaluation appears as a key point of the new model conception. Therefore, the new services must integrate evaluation displays allowing the stakeholders to contribute to the solution performance in a qui long period. Such relationships mean to take some distance with the market conception of the exchanges, as it means the broadcasting of a servicial conceptual framework.

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