

Integrating tacit knowledge through value co-creation: the case of Pas-de-Calais Habitat

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Abstract

Purpose – The present paper aims to explore under which conditions a supplier can enable their customers to perform as co-creators of value. The supplier's perceived legitimacy and the ability to integrate customers' tacit knowledge in the value co-creation process are analyzed through the Pas-de-Calais social housing operator case.

Methodology/approach – This article is based on an extensive collaboration with PDCH since 2 years and the research project relies on several research approaches such as access to the internal knowledge management platform of PDCH, experiments with inhabitants and in-depth interviews with managers of PDCH.

Findings – Even if value in use is always co-created with the inhabitants, the level of engagement of the inhabitants is highly variable. The perceived legitimacy of the company to support the co-creation process and its ability to integrate inhabitants' knowledge resources, especially tacit ones, appears to be two major conditions to foster the value co-created.

Originality/value –

This paper aims first to link knowledge management and co-creation of value. Being a key operant resource, knowledge and especially tacit knowledge gain to be integrated to the value creation process. Second, we explore two key conditions under which co-creation of value in use can be seen as valuable both for company and its customers that could foster the customers to actively integrate their own resources in this process.

Keywords: knowledge management, co-creation of value, tacit knowledge, legitimacy

Introduction

Despite the growing role of knowledge in the competitiveness of companies (Dibiaggio and Meschi, 2010, Vargo and Lusch 2004), marketing tend to over rely on explicit knowledge and neglect the importance of tacit knowledge (Kohlbacher, 2008). If explicit knowledge is easily transferable and imitable, tacit knowledge can not be expressed outside of individual experiences or actions. Tacit knowledge is contextual and idiosyncratic. It plays a crucial role on innovation and the way value may be created to build a competitive advantage. By keeping the customers out of the process of creating value, the company can at the best collect explicit knowledge from the customers. At the opposite, co-creating value with the customers allows to integrate both explicit and tacit knowledge in the value creation process, going beyond the knowledge *about* the customers to integrate the knowledge *from* the customers (Felix, Hoffmann and Sempels, 2010).

Nevertheless, co-creating value with customers is not straightforward and barriers may appear. In order to better understand the co-creation process, the case of Pas-de-Calais Habitat (PDCH) is analyzed. PDCH is the third social housing operator in France, and the first in the Nord-Pas-de-Calais Region. Its activities present a multi-party stakeholder orientation addressing public policy decisions, local government agreements, involving tenants and dealing with a myriad of suppliers and service providers¹. PDCH has a long tradition of dialogue with their inhabitants to design and to manage their neighborhoods. But PDCH has decided to go a step further in order to truly engage their inhabitants in a process of co-creation of value in use. This paper tries to define the key conditions for a company to enable customers' willingness and ability to integrate their knowledge and to perform as better value in use co-creators.

This article is structured as follows: first, it presents the literature review regarding value co-creation, customer's knowledge, and co-creation implementation. PDCH is then presented, followed by a presentation of the results of co-creating two commitments of PDCH service quality chart related to occupational integration for unemployed tenants and energy efficiency. Discussion highlights the importance of understanding conditions for co-creation.

From value creation to value co-creation

Co-creation of value goes beyond the co-production, since the quality of the customer experience is at the heart of the co-creation process and is ultimately what the customer values. In this configuration, the value is jointly created by the company and customers (and more largely stakeholders) (Norman and Ramirez, 1993). Unlike co-production, in direct service provision (Moeller 2008), customer participation in the process of value creation can be achieved at all stages

¹ PDCH (internal document).

of the value chain, from R & D to the consumption and use, through design, logistics, production, added services, and so on. The derived co-created value may be either potential value, value in exchange or at last value in use. The center of value co-creation is the contextual experience of the clients and their resources to determine, set and adjust the offer according to their specific needs. It is not the product or service that is depositary of value, but the experience resulting from the interaction with the company. Compared to value co-production, the company is no longer alone in orchestrating the customer experience. Indeed, the client wants to assume a leading role on the script and performance of the experience, and not just in the production phase as the healthcare sector example illustrates (Felix, Hoffmann and Sempels, 2010).

As asserted by Payne and al (2008, p88), thanks to “opportunities provided by technological breakthroughs (eg: broadband, digital TV, third generation mobile, ...)”, co-creation of value has greatly developed via Internet, which provides unmatched opportunities for interactions and connections. While the Internet facilitates and enhances the possibilities for co-creating with customers, it is not a sine-qua-non condition, as the Pas-de-Calais Habitat case shows. Facilities co-management (e.g. a room, a park), for example, can be a way to make easier the appropriation of shared places by and for residents, creating the most conducive conditions to their adequate use. For example, young people living in social housing often seek to have a room to meet and hold events. The social housing operator is generally reluctant to provide such a space, due to risks of damage and degradation. One proposition made to the youths is that they would accept to give access to a room if one individual takes responsibility for its management. Such an offer is hardly acceptable, because nobody would agree to bear alone the responsibility for the shared space conducting to a dead-end.

A co-creation approach would rather develop a space co-managed. First, the operator could help a group of young people to set up an association in order to transfer the burden of responsibility to a legally constituted body. The space can then become a place for resource sharing between the operator and this association: sharing of equipment, projects, ideas for youth activities or, more broadly, for the community. In this configuration, space and activities don't need to be contractually pre-specified, but emerge out of a shared agreement between both parties involved in the co-management. The problems of security and good management of the place being shared, the operator and the association can work together to find creative solutions. Compared to the classical model where the roles are fixed and goals possibly antagonistic, there is here an alignment of goals. In addition, co-management can deliver benefits far beyond those of mere availability of space: a sign of trust and esteem that can lead to a revaluation of the youth, development of their management skills, organizational learning for the operator by a better understanding of the young and the way to set up privileged relations with a public reputed for not being easy, etc. We shall

now understand the different forms of the most important resource to be integrated in the co-creation process: customer's knowledge.

Integrating customer's knowledge

The conventional approach to marketing, characterized by the classic process of value creation or its extension to the co-production, has been mainly focused on explicit knowledge of markets agents – mainly customers - neglecting the important role of tacit knowledge in the development of competitive advantages. This distinction between explicit and tacit knowledge is crucial and is based on the idea that the individual knows more than he/she is able to say (Hoffmann, Felix and Sempels 2010). Explicit knowledge refers to knowledge easily transmitted and expressible in a formal language; it is easy to codify and transmit. Tacit knowledge, in turn, can be hardly expressed outside of the context in which actions have been held. It is linked to the skills, know-how and representations of individuals. In this sense, it is difficult to collect, codify and transmit. However, tacit knowledge plays a key role in the innovation process and, more broadly, in generating competitive advantages (Nonaka, 1994).

By keeping clients out of the value creation process or by integrated them in a forced, controlled and uncreative manner, the company can only collect explicit knowledge about client's needs and their use of products and services. Customer relationship management (CRM) systems illustrate this collection of information and knowledge about customers. By contrast, Desouza and Awazu (2004) and Gebert and al. (2003) suggest the development of CKM instead of CRM, that is, customer knowledge management. CKM goes beyond CRM in adding to knowledge *about* customers, knowledge *for* customers and knowledge *from* customers.

In this regard, the process of value co-creation is interesting in its capacity to smoothly integrate knowledge from customers. In addition, because the value is jointly co-created by the company and customers, companies must naturally allow customers access to knowledge about organization. It is therefore quite natural that the three previously mentioned types of knowledge (about, for, from) are exchanged in the process of value co-creation.

Similarly, because the co-creation is experiential and contextualized, it allows the expression of tacit knowledge as well as explicit knowledge. For example, in the meeting room co-management example developed above, the social housing operator would encourage young people to accept to share and integrate their own resources to those of PDCH. Tacit knowledge would have a crucial role in the success of this project, co-creation being the only way to make this valuable resource available, shared and integrated. If value is embedded in individual experiences, tacit knowledge is a resource which has to be enhanced (Korkman 2006) through companies positive interventions.

Tacit knowledge as routinized actions, know-how, image, knacks... may build value for the customer and give him a more valuable role in exchange and value in use co-creation.

How to implement value co-creation?

Several consequences emerge from the difference of value co-creation towards the traditional value creation process. In its ultimate form, co-creation calls for co-governance and co-responsibility of stakeholders. Participation alone is usually not enough. In addition, to function properly, co-creation must be supported by clear procedures on many aspects: customer learning, identification of domains of co-creation, support to facilitate co-creation, implementation, impact measurement, capitalization and organizational learning, among others. Far from being improvised, the co-creation process should be systematized. In this regard, marketing must evolve to a role of facilitator structuring processes of value co-creation.

Four building blocks are required to establish a co-creation process (Prahalad and Ramaswamy, 2004): an open dialogue between the company and its customers (or in a broader manner with its stakeholders), favoring knowledge sharing and going further than hearing the voice of customer; mutual access to useful knowledge and resources; transparency of exchanged knowledge; and the evaluation and management of risks-benefits of the co-creation for the company and for the customers. The latter is important especially when co-creation is founded in a co-governance and co-responsibility with stakeholders. The access to resources and the transparency of exchanged information should help the understanding and management of the benefits and risks of this process. These four building blocks demand the development by the company of specific competences to define and organize the process and to enable dialogue, access, transparency and risks-benefits management of co-creation. The supplier's role is one of providing interactions and encounters to help customer in producing value (Storbacka and Lehtinen 2001).

If value co-creation is a promising path, it is not easy to manage and it is not without risks. At a glance, co-creation can generate risk or legal consequences concerning, for example, intellectual property rights as evidenced by the example of Fon (Leroy, 2008). Other risks include loss of control of the process, brand image risks, and difficulties emerging from stakeholders diverging goals.

Co-creation thus requires from both sides larger efforts than a conventional commercial relationship. It demands the development of specific competences to motivate stakeholders to co-create and to manage their time commitment. It also calls for a proper calibration of the return on effort and demands a precise definition of the rights and duties of each side.

To our knowledge, co-creation with tenants in a socio-economical precarious situation has not yet been studied. This population is characterized by low literacy and is frequently the subject of social

exclusion and stigmatization. This study aims to understand co-creation in this specific setting where explicit knowledge may be particularly out of balance.

Co-creation at Pas de Calais Habitat

As presented above, PDCH is the third social housing operator in France, and the first in the Nord-Pas-de-Calais Region. It manages nearly 40.000 housings and builds more than 700 new ones annually. PDCH has a long tradition of dialogue with their inhabitants to design and to manage their neighborhoods and recently decided to go a step further in order to truly co-create with them whenever it is possible. The authors participated in this process through research collaboration with PDCH in the period between end 2008 and early 2011.

An evaluation of the building blocks required to establish a co-creation process (Prahalad and Ramaswamy, 2004) shows that PDCH holds an open dialogue with its tenants and stakeholders, favoring knowledge sharing; they give access to useful knowledge and resources; there is some degree of transparency of exchanged knowledge; and they evaluate and manage the risks-benefits of the co-creation process. This research project is a testimony of their willingness to develop specific competences to enhance and organize the process and to enable dialogue, access, transparency and risks-benefits management of co-creation. This effort to “listen, customize and co-create” is clearly led by PDCH to connect and to use business processes that cut across traditional organizational functions (Bolton 2006).

Our collaboration relied on several research approaches. First, we had access to the internal knowledge management platform of PDCH, where all the reports on ongoing dialogue with inhabitants and co-creation projects are available. We had therefore access to extensive information on co-creation attempts.

Second, we in-depth interviewed and interacted with two managers of PDCH belonging to the executive committee, one in charge of innovation and the other of inhabitants’ relationship management. An iterative process of exchange has been implemented with these managers to identify the resources and the activities that could be favorable for value co-creation. In the context of the development of PDCH quality service commitments, two domains for co-creation were identified and explored: occupational integration for unemployed inhabitants and energy efficiency.

PDCH quality service commitments

In 1999, PDCH formalized as a part of its quality policy a chart with 17 service quality commitments related to four domains: availability, cleanliness, security and tranquility.

A concise version of the commitments is presented in the table below.

Domain	Commitment
Availability	1. An advisor answers your request within one month and precise the anticipated length of waiting.
	2. An advisor shows you the accommodation and the functioning of appliances.
	3. The building guardian and the service point advisor are your favored interlocutors: they give an answer within 48h to your requests.
	4. To be even more at your disposal, we have extended our opening hours including opening on Saturday morning.
Cleanliness	5. Before each rental, floor, ceilings, walls, and interior woodwork are checked to guarantee they are clean.
	6. Before each rental, the bathrooms are overhauled, the shower and toilet lid replaced. The housing is disinfected, deodorized and bugged.
	7. The entrance to the building and the stairwell are cleaned regularly, at least once a week.
Security	8. When you move in, the housing appliances are controlled, changed if necessary, and checked at least once a year, as well as those of the common parts.
	9. You can immediately use your gas stove, we install the connecting pipe to the gas installation.
	10. When you move in, the lock cylinder of your dwelling at the front door is replaced.
	11. You can contact us 24/24 and 7/7: outside working hours, tenure security will answer and take immediate action regarding security.
Tranquility	12. Suppliers ensure an annual visit for preventive maintenance to avoid breakdowns and when they occur, they make repairs within 24 hours.
	13. In the event of lift failures, the repairman comes in 2 hours (except at night). If people are trapped inside, they are rescued within an hour.
	14. In case of heavy work (replacement of boiler, elevator...), reparation time is negotiated with you.
	15. We help building a qualitative collective life. The service point responsible and the guardian organize, at your request and with your help, neighborhood meetings on topics relevant to the life of your building.
	16. We act quickly in case of nuisance: site visit, mediation and, if necessary, intervention with your help to punish the responsible(s), and reporting of taken actions.
	17. In the particular case of vandalism and damage to your property, we give you useful information to help you in engaging appropriate measures.

Table 1: PDCH commitments

PDCH is currently developing four new commitments to build a “Sustainable and Solidary Development” chart. They relate to energy efficiency, occupational employment, relationships with suppliers, and sustainable and solidary development. PDCH wishes to co-create these 4 new commitments with stakeholders, particularly with inhabitants. In agreement with the PDCH direction, we studied the co-creation process of commitments 18 (energy efficiency) and 19 (occupational employment).

Co-creating commitment 19 related to occupational employment

This commitment refers to occupational employment. It is a sensitive issue due to the inherent precarious situation of social housing inhabitants (lack of training) and the context of economic crisis. Moreover, this topic has been among the top priorities of French public policy for the last decade and is under constant media scrutiny. The writing of this commitment aims answering to a socio-economic situation characterized by three elements:

- a difficult job market context (high unemployment rate, especially among low literate people);
- a potential of economic development (physical proximity of sectors employing: building and public works contractors, services);
- a reality of social exclusion for three groups: young people, women and recipients of inclusion revenue;

Even if employment could be perceived as being mainly under the government's responsibility, PDCH has a long experience as a partner to employment insertion actors and wishes to contribute to the job insertion of its tenants. They have indeed agreement with many partners and institutions to integrate unemployed people with subcontracting construction firms working in neighborhoods managed by PDCH. Therefore, engaging tenants in the commitment writing is seen as a first step to address this important issue.

The authors conducted an experiment aiming to test the influence of framing on the invitation of inhabitants to participate in the redaction of commitment 19². The experimentation was conducted in one PDCH neighborhood (Le Portel) in the period of April to June 2010. The population was constituted of 846 accommodations of this neighborhood: 420 having at least one household member person with a working activity ("active") and 426 without any household member with a working activity ("inactive"). Invitations to participate in a meeting to co-create this commitment were sent to these tenants and a follow up phone call was done to 337 tenants. 52 people engaged themselves to participate and eventually 29 people came to the meeting that took place end of June 2010. The table below presents a synthesis of the meeting.

Topic	Quotations
Insertion structures	"Pôle emploi ³ is an inhibitor and not a facilitator"
Government incentives	"For certain people is easier to live with government subsidies than with a salary" "If we find a job, we may need to change housing. Can PDCH help?"
Definition of	'It is a CDI (illimited working agreement) in a

² A detailed account of this experiment is presented in a book chapter (Hoffmann, Sempels and Felix, *forthcoming*).

³ Pôle Emploi is a French governmental agency which registers unemployed people, helps them find jobs and provides them with financial aid

sustainable employment	reliable company”
Competences	<p>“Self esteem is not easy to have when we live with government subsidies”</p> <p>“Training sometimes does not correspond to employment opportunities”</p>
Access	“Limited mobility makes it harder to find a job”

Table 6: Synthesis of the co-creation meeting

Tenants’ contribution highlighted issues that were already known to PDCH. A central doubt among inhabitants is the capacity of PDCH to help tenants about this issue. Tenants do not see clearly the credibility and the legitimacy of PDCH to act on this topic. This loss of perceived legitimacy is potentially an explanation for the low willingness to participate in the meeting and to collaborate with PDCH compared to previous experience of the company in engaging tenants in collaborative activities.

The meeting allowed the identification of a few examples of tacit knowledge (mainly concerning competence development for insertion, personal experience drawn on individual attempts to meet people in charge of the local public labor policy or to succeed in receiving an answer to a job offer...) but it mainly captured explicit knowledge. This is not surprising in the light of the interaction form that was chosen, that is, a group meeting.

From a managerial standpoint, PDCH considered useful to integrate people in the commitment redaction process to collect first-hand perception, but the meeting did not generate any novel insight. Insufficient tenants’ participation dried up the source of input to help PDCH to write commitment 19 and to integrate tenants’ knowledge resources that could have been an opportunity to develop values in exchange and in use in a co-creation process. Peripherally, it might also point toward the difficulty for PDCH to give some promising arguments about what it can do for its unemployed tenants and to highlight the potential value of this meeting.

Co-creating commitment 18 related to energy efficiency

This commitment refers to energy efficiency. It is an issue that is on the top of government and media’s agenda. Consequences are felt in everyday life with regulations, such as progressively forbidding the use of incandescent lamps. The writing of this commitment takes in account the following context:

- have a medium to long term view (e.g. lamps may reduce energy consumption but be more toxic);
- focus on fixed charge for the tenant (e.g. investment of solar panel installation should be paid off over time);
- how to use water to clean the communal parties (e.g. use only rain water);

- how to preserve an active role for the tenant (by opposition to constraining the tenant to accept PDCH choices).

PDCH see itself as a supporter of operant resources aiming to accompany, educate, communicate and share knowledge with tenants aiming to build a win-win situation where energy consumption is reduced. Similarly to commitment 18, PDCH organized meetings with tenants aiming to collect inputs to write the commitment and more globally to share knowledge with tenants about the topic. Four meetings were organized, each one gathered ten or so people. The four were held at the month of June 2010. These meetings were presented to inhabitants as coffee meetings whereby it would be possible to friendly exchange about energy efficiency and energy charges reduction.

The table below presents a synthesis of the meetings.

Topic	Conclusion
Heating	Individualize consumption: tenants wish to be free to decide to warm up for better comfort (and consequently paying more) or turning off the heating to save money. Collective heating makes some accommodations overheated whereas others are under heated.
Daily actions	Save energy by: <ul style="list-style-type: none"> - turning off equipments (vs stand-by), - closing water down when not using it (e.g. brushing teeth), - use rechargeable batteries, - Use energy saving bulbs, - Installing water saver and aerators on the taps, - Take showers instead of baths, - Reduce the number of flush, - Educate children,
Electricity	Monitor expenditure Overconsumption = set up alerts “Stop stand-by” : tools to reduce energy consumption Collective areas are always lit = sense of security but also misunderstanding on the part of tenants Extend motion detectors because the timer is not suitable Idea for a day without electricity to mark the beginning of a collective effort Installing solar panels on the roof and/or patio Installation of energy saving bulbs at the entrances and common areas.
Water	Regulator of water amount at the toilet flushing not systematically installed Attach flow regulators on taps to reduce its consumption Install individual meters Installing a faucet to save water Recovery of rainwater: <ul style="list-style-type: none"> - Yes, but with a reasonable cost - Use it for toilet and laundry - Problem of cost associated with installation and maintenance - Use it for cleaning the common areas but it is difficult to accept a lower frequency of cleaning if low rainfall

	<ul style="list-style-type: none"> - Draw inhabitants' attention to the heavy work of cleaning staff to decrease the frequency of cleaning stairs and halls <p>Water for consumption:</p> <ul style="list-style-type: none"> - Yes, if limestone treatment (knowing that 50% of tenants consume tap water) - Problem of installation and maintenance of facilities
Waste	<p>Finding a place with trash cans away from windows</p> <p>Make a flower pen around the waste disposal</p> <p>Help people for bulky</p> <p>Compost:</p> <ul style="list-style-type: none"> - Recover grass mowed by the city to make composts around our buildings - Do it in the bottom of the buildings, but taking care of choosing the right place - Create a garden "parent/child": incentive people to bring their compost so they can then exchange for vegetables for example (win / win approach) <p>Separate waste to create new materials</p> <p>Waste separation accessories (large bag) lead to a loss of space in the dwelling.</p>
PDCH role	<p>Energy efficiency ROI is a shared notion</p> <p>Accompanying the tenant enabling him/her to best manage its housing but without doing everything for him/her</p> <p>Collective approach</p> <p>Initiate together: new services (must see, understand), new techniques (self-help)</p> <p>At a fair price</p> <p>Close to daily interests</p> <p>Be realistic, see gains</p> <p>Lack of information to tenants on the emergence of new technologies</p>
Clean energy	<p>ROI of solar panels? Region is not sunny</p> <p>No particular reluctance on the aesthetics of solar panels and wind turbines</p>
Role of Energy Suppliers	<p>Real-time information</p> <p>Inform tenants + provide reliable information</p> <p>Develop a subscription including all energies</p> <p>Diversification of suppliers is too complicated</p>
New Building Construction	<p>Better insulated but the charges remain the same</p> <p>Installation of PVC windows, wooden building = less expensive, it is worth the effort of waiting a little more for better insulation.</p> <p>Great divide between old and new construction with "high environmental quality" (HQE)</p> <p>Tenants want PDCH rather to improve their current housing than investing in new construction.</p>
Role of Tenant	<p>Actor / consumer: awareness, education</p> <p>Collective awareness:</p> <ul style="list-style-type: none"> - Education of children - Collective reflection on saving energy - Adapt accomodation size to family size - "Daily invention" - Willingness to be an actor <p>More technologies and energy will be expensive and more we will want to consume otherwise, or financial difficulties will follow.</p>

As it is observed, a rich amount of information was collected concerning tenants' knowledge, practice, suggestions and feelings about the topic. Examples of explicit and tacit knowledge are numerous. For example, concerning waste disposal suggestions include make a flower pen around

the waste disposal and to recover grass mowed by the city to make composts. It is also noted that waste separation accessories lead to a loss of space in the dwelling. Knowledge from and for the inhabitants was exchanged beyond the classical knowledge about them.

A lot of information was exchanged during these active dialogues. In this approach inhabitants were first expected to be willing and enough knowledgeable to express explicit knowledge about the benefits of energy efficiency. Ideas such as turning off equipments or using energy saving bulbs were mentioned. Additionally, these conversations highlighted the importance of inhabitants' tacit knowledge (e.g.: the way they use to convince their children to save energy or their personal recipes to reduce to flush housing without reducing cleanliness, ...).

All these tacit knowledge emphasizes an experiential view of consumption (Hirschman and Holbrook 1982). Demonstrating that there are tips and tricks to save energy resources, inhabitants develop not only a rational act but also from contextual and cultural viewpoints (Addis and Holbrook 2001). This knowledge is obviously knowledge from customers and, finally, knowledge for them rather than about them.

PDCH got pretty satisfied from these exchanges and they integrated the numerous lessons both in writing commitment 18 as well as integrating in their routines the knowledge obtaining out of this process. It shows how a win-win situation may be enabled by the integration of operant sources from both parties. It exemplifies the process of resource integration and service-for-service exchange where is co-created through the active participation of all service systems engaged in exchange (Vargo, Maglio and Akaka, 2008).

Discussion

The contrasting results of integrating tenants in the writing of commitment 18 and 19 lead us to reconsider the central question of the conditions under which an operator can enable customers to perform as co-creators. A greater resistance was encountered to engage tenants in co-creating commitment 19 related to occupational employment, whereas they contributed much more fruitfully in writing commitment 18 related to energy efficiency. Our exploratory study focused on two main conditions, likely among others, that may be needed to engage customer in co-creation process: operator legitimacy and availability of tacit knowledge from customer who is willing to carry out and carry on the practice. These two conditions are tightly linked, because, as supported by Payne and Alii (2008, p92), "the more the customer understands about the opportunities to exchange and to co-create, the greater the value that can be created". Here, these two conditions seem to interact to determine the expected level of relationship according to operator organizational learning (value creating processes, actions as prime resources integrator, based on hard data such as customer satisfaction measures, but also on a deep understanding of customer experiences and processes) and

customer learning (customer experience of a supplier and its offerings giving rise to cognitions, emotions and behavior) (Payne and al, 2008).

In the case of occupational employment, PDCH is not seen as a legitimate actor to help tenants. Customer learning about operator is unable to cause a “double loop learning” (Argyris and Schon 1978) in which customer reflects on their own processes and resources, for instance, about unemployment and how they have already been engaged or not in practices with the supplier, and finally accepts or not to perform as co-creator. Likewise, operator organization learning did not take enough in account the poor value co-creation potential embedded by customer relationships with PDCH and concerning occupational employment.

It is the exactly opposite concerning energy efficiency. PDCH is seen by actors as a provider of social housing, therefore issues related to housing are in the perceived perimeter of PDCH. Our study points out what Slater and Narver (1995) suggest, saying that organizational learning is an important contributor to subsequent organizational performance. This is certainly the case for energy efficiency, but it is not for employment. In France, employment is perceived as government’s responsibility. It is noteworthy that in the studied neighborhood, half of households in working age have their members unemployed. Reactions to that situation contrast from resignation to indignation, but PDCH is not perceived as being of any help in this situation.

Nevertheless, PDCH has the power to help tenants, for example, due to its agreement with subcontracting construction firms working in neighborhoods managed by PDCH to integrate unemployed people from these neighborhoods. This raises the question about the capacity and willingness of PDCH to act on this perceived legitimacy and, in this case, to better communicate this integrated resource (agreement with subcontractors) as a prerequisite to any value co-production and co-creation in exhibiting potential value for unemployed tenants. A risk exists that unrealistic expectations could be created over PDCH role. A clear and consistent message should be done explaining that PDCH can help guide people but in any case could help them finding a job.

Conclusion, limits and future research directions

Are the operator legitimacy and the customer tacit knowledge availability the only criteria facilitating or hindering stakeholders to engage in a co-creation process? The question remains an open question and further research is necessary to uncover how companies can design their knowledge management activities, as learning organization, around identified value co-creation processes. This study concurs with the view of Woodruff and Flint (2006) that “relatively little is known about how customers engage in co-creation”. Our focus is on how a supplier can seek to manage the co-creation of value. The question is of interest, because marketers, in developing organization learning to design and structure the best use of their resources, could prevent, as

foresaid, potentially costly and unnecessary investments. Our results invite to pay a broader attention to the metrics which companies might use to measure and monitor, first, the operator legitimacy in a market space in order to better capture the means to base it, beyond company image issues. Second, these results invite to promote marketing metrics and measures to assess the broader experiential sense of customer learning about market space and determine with a suitable methodology (exploring mental representations concerning remembering, internalization (mental associations) and proportioning (mental categorization, prototypical processes...) the availability-accessibility of individual, contextual and idiosyncratic knowledge as tacit knowledge. This customer tacit knowledge concerning a space market or an activity can be partially seen as a social capital made of relationships which produce value for customer, independently or with the support of the supplier. Such a viewpoint, as proposed by Arnould (2008), underscores the interest of cluster theory as a resource theory to tune these methodologies. Cultural, geographic and social relationships with external people or with suppliers may be conceived of as resources “that affect their learning abilities, innovation outcomes” and needs of human development (Ganesan and Alii 2005)

Indeed, the development of these tools is a potential case where academic research helps and informs practitioners, thus bridging the research practice gap (Reibstein, Day and Wind, 2009).

From a managerial standpoint, PDCH is firmly engaged in co-creating its four new quality service commitments with its stakeholders. They started to ask meanwhile which of their previous 17 commitments are suitable for co-creation. Identification of the relevant criteria to decide on co-creation actions is needed for this organisation.

According to the cluster theory as a resource theory, an originality and a limit of this study concerns its development with low literacy individuals. If impact on co-creation engagements seems to be unrelated to this fact, this remains to be better understood. Traditional data collection tools looking for explicit knowledge seems limited with this target. Which are the most adapted ways to capture tacit knowledge and eventually to lead individuals to engage in co-creation?

This study represents an evolution in getting knowledge *about* tenants to integrate knowledge *from* tenants. However, individual data collection could be a more interesting data collection method when co-creation relates to sensitive issues like unemployment. A risk of a collective data collection is the development of a collective search to identify an external source for the failure situation (e.g. for unemployment: “it is the fault of the government, of globalization, and so on.”) that does not help to advance the objective of the co-creation process. The role of the moderator is central to conduct such a meeting in a constructive manner and eventually facilitate the emergence of propositions to help people in this situation. This is especially important for a population living in a precarious condition where co-creation may have a societal impact.

Other venues include the identification of adequate feedback mechanisms to enable the emergence of knowledge *for* the customers. It is an underlying objective of the writing of these commitments, but no formal tools are in place to allow customers to obtain the results of the co-creation process, besides getting to know and experience managerial consequences of the definition of a commitment.

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