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The power of co-construction and dialogue to interact with industry in strategic logistics, OM and SCM research projects

Science and Technology

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Abstract

The purpose of this paper is to study industry-academia interactions in strategic logistics, OM and SCM research projects. The paper is based on an in-depth retrospective analysis of eight research projects performed in collaboration with industry. Methodology combines single and cross-case analysis. Results point out the importance of industry-academia dialogue and co-construction at each step of a research project. They provide some guidelines to improve the management of such projects and the quality of their outputs for both parties. We conclude by suggesting some issues to deepen dialogue and enrich co-construction in strategic logistics, OM and SCM research projects.

Keywords: research project management, industry-academia interactions, strategics logistics, OM and SCM

Introduction

Most academics consider that research in logistics, OM and SCM is useful for companies, and almost every research work sells its so-called managerial contribution. But few academic papers seem to rely on genuine industry-academic collaboration. One should not conclude too quickly from a literature review based on academic journals that such research does not exist or is rare (referred as the "white space" in Frankel et al. 2005). This only shows that despite the call for a greater research variety, in particular more field research (DeHoratius and Rabinovich, 2011), logistics, OM and SCM literature remains mainly positivistic and rationalist (Näslund, 2002), and, looking for more scientific rigor, seems to have lost its connection with practice (Touboulic and Walker, 2015).

Nevertheless, for politic, economic and pragmatic reasons, this kind of research is developing. Most funded calls for research (ex: H2020) put pressure on having companies in consortia and producing more value for industry and society. Companies look for external expertise (alternative from consultancy) and diversify the partners participating in their open innovation processes. Academics look for "problems" with practical relevance combined with funding... But collaborating with industry is not so easy and many academics experience difficulties related to the conflicting logics behind such type of collaboration (some of them being identified in action research, e.g. Coughlan and Coghlan, 2002).

In line with the theme of the call for abstracts of EUROMA 2016, the purpose of the paper is to answer the following question: how can we improve industry-academic *interactions* to gain both in managerial, societal, and academic relevance and value, i.e. being useful and creating value for companies and society, as well as being valuable from an academic point of view with "publishable" material and innovative theoretical results?

Surprisingly, there are very few papers in logistics, OM or SCM literature that detail the way academics and practitioners interact, or should interact, with 'industry' (in a broad sense of this term, i.e. not restricted to industrial companies) in research projects. The ones that do are mainly papers that discuss or are based on action research (e.g. Naslund et al., 2010; Touboulic and Walker, 2015) and case study methodology (e.g. Stuart et al., 2002; Voss et al., 2002; Dubois and Gadde, 2002). In most cases, the papers describe some aspects of the interactions with respect to the context of the research (to clarify the relationship with the field in the selected methodology), to explain how the researcher(s) gathered the data (to give credibility to data quality), or to attest of difficulties in the research process. To our knowledge, the nature of reported interactions is mainly 'technical' and does not reveal the dynamic of interactions along the research project.

As a member of a research centre specialized in strategic logistics, OM and SCM, with a tradition of research performed in close collaboration with industry, and having a long experience in such research projects, the purpose of this paper is to report about industry-academia interactions in achieved research projects and to discuss about the importance of industry-academia dialogue and co-construction. We first present the research design for this paper. Then, we detail the results of the retrospective analysis of eight research projects. We discuss the importance of industry-academia dialogue and co-construction before concluding the paper.

Research design - description of the eight research projects

The paper is based on a reflexive thinking considering past research works conducted *in interaction* with industry. Among the research projects we have been involved in, we selected finished projects that were, since the beginning, mixing academic and industry outcomes. Another criterion was to be able to report about the overall research project process. Eight projects were eligible from 2000 to 2015. All the research projects were related to *strategic logistics, OM or SCM*, i.e. concerned the relationships between logistics, OM and/or SCM and the overall strategy of companies or organisations.

Being part of the projects since the beginning of the discussion with industry partners, and having the traceability of the overall processes, it was thus possible to think back about: the construction of each project, goals and expected results for companies vs. researchers (*ex ante*), the overall management of the project (including the making of research choices), difficulties encountered during the research process, results for the companies vs. researchers (*ex post*), potential for academic publication (and effective published papers), experience gained about how to manage industry-academic interactions.

Each research project is thus, for this article, considered as a case study and is analysed retrospectively. For each research project, we also considered its characteristics (main topic, duration, number of researchers, funding...) and the explicit or implicit research choices (ontology, epistemology, methodology, reasoning mode). We combined single and cross-case analysis to end with results. Table 1 and 2 give an overview of the eight cases, showing a variety of research projects. For confidentiality reasons, the names of the companies, all having leadership positions, are not mentioned.

Nº	Research	Origin of	Objective for company	Objective for	Characteristics
11	project	interaction	(or anto)	researcher (ar anta)	of the project
	project	Demain	(ex unie)	researcher (ex unie)	of the project
	partner(s)	Domain			B
P1	Two LSPs	Companies	Understand the	Build a research-	From 03-2004
	(LSP1 and		dynamic of health	based logistics/SCM-	to 06-2005
	LSP2)	Logistics	distribution in France,	oriented prospective	3 mains steps
		SCM	prospective analysis to	methodology	with collective
	Three		support LSPs' strategic		decision
	academics		expansion in this		Qualitative
			market		method
P2	Health	Company	Answer the questions:	Deepen the study of	From 09-2005
	wholesaler	1 0	Is logistics for us a	logistics as a core	to 11-2005
	distributor	Logistics	"core competence"?	competence	1 step
		- 0	How can we build a	Study logistics /	Workshop
	One		strategic approach	strategy interactive	with ton
	academic		based on logistics?	loon in their case	managers
P3	PSL1	Researcher	Get a better	Explore a LSP's	From 10-2006
10	1521	1100000101101	understanding about	points of view about	to 06-2008
	One	SCM	SCL clarify LSP's	its roles in SCI	2 main steps
	academic	bein	strategy and role in	compare to its	Qualitative
	ucuuciine		SCL understand	clients' point of view	method (2
			clients' view about	(alignment within	waves of
			I SP's role in SCI	(ungninent within dvads?)	interviews)
P4	PSI	Researcher	Knowledge transfer	Explore a LSP's	From 10-2009
1 7	1 SL	Researcher	about SCL clarify their	noints of view about	to 11-2010
	I SP3's	SCM	vision about their role	its role in SCI	1 main sten
	role in SCI	SCIVI	in SCI and their	Confirm results of	Quantitativa
	Two		atratagy via à via thair	D2 avplora now	Qualititative
	Two		strategy vis-a-vis then	r 5, explore new	focus group
D5	Industrial	Commony	Challenge their lean	Discover a new	Erom 02 2010
гJ	hiviry	Company	agile management	"industry" (for us)	to 09 2010
	company	OM SCM	approach	Confront theoretical	2 steps
	company	OW-SCW	Get prospective ideas	concepts and	Z steps
	Three		about SSCM aco	provious research	workshops
	academics		design and	results to a specific	and focus
	academics		romanufacturing	context	and locus
D6	Group of	Pasaarahar	A new or the questions:	Duild a "gaparal"	From 01 2012
10	companies	Researcher	Answer the questions.	SSC scanning	to 07 2012
	in	Sustainable	is a conective (inter-	framawark compara	$\frac{1007-2013}{2}$ stops
		Sustainable	organisational)	namework, compare	5 steps Mootings two
	consumer	SCIVI,	face face in the second	scalining of different	focus groups
	goous	logistics	reasible? How to	actors in a SC,	dobriofing
	Turo	allu	prioritise conective	question inter-	with
	1 w0	transport	scanning targets?	organisational	witti
D7	Industrial	Compony	Challongo their strate	Derticipate to	Erom 01 2012
r/	Company	Company	related to sustainable	rancipate to	$r_{10111} 01-2013$
	Company	SCMOM	development (related to	suategic unitking of a	Dronora taria
	0	SCIVI-UIVI-	le veropment (related to	Detter and and a line	riepare topics
	One	logistics	iogistics, OM and SCM	Detter understanding	and participate
	academic		issues)	of inter-functional	to a mixed
			Share knowledge about	interfaces in strategic	stakenolder
			SSCM issues	SSCM developments	panel every
D 0				Strategic case study	year
P8	LSP4	Company	Knowledge transfer	I ranslate theoretical	12-2015 to
	m		about logistics an SCM	concepts and	01-2016
	Two	SCM-OM	scanning activities	previous research	Conterence +
	academics		Improve managers'	results to a specific	workshop with
1			scanning behaviour	company	top managers

Table 1 – About the eight cases of industry-academia research project

Project	Output for practice	Output for academia	Publications (1)
P1	Better understanding of	A how-how about making	No immediate publication
	health distribution	Logistics-SCM oriented	(confidentiality)
	dynamic and the potential	prospective studies	Generic results, combined
	role for LSPs	Discover important	with other experiences were
	Clarification of the	methodological issues	reused in 2 conf. papers
	business models they	The basis for a so-called	(2007), 1 article (2008), they
	could explore (alone or	"logistics intelligence	inspired SSCM scanning
	within an alliance)	process" (LIP) we reused	conf. paper (2009) + 2 book
	HSDM (2)	afterwards	chapters $(2010, 2011) + 1$
			article (2011) and project P6
P2	Making company's top	Confirm some hypothesis	No publication about this
	managers understand the	related to health SC strategic	case (confidentiality)
	importance of its	changes (P1)	
	organizational logistics	Refine what is a logistics	Generic results reused in a
	A trigger to develop	Confirm how greative is the	book chapter (2007)
	strategic logistics	logistics / strategic loop	
P3	Realize they had not a	In-depth understanding of	Results nublished in 1 conf
15	unified approach of SCI in	the paradoxical roles a I SP	paper (2007)
	the company	can play in SCI	+
	Clarify their vision of what	Clarifying the relationships	was the trigger for 2 conf.
	could be their SCI strategy	between LSP and its client	papers (2008), 2 articles
	and their role vis-à-vis	in SCI	(2008, 2009) and for project
	their clients' SCI	Distinguish between being	P4
	(HSDM)	integrated in a client SC and	
		integrating the client SC	
P4	Realize they had not a	Confirm P3 results	Results published in 2 conf
	unified approach of SCI in	Open doors to news ideas	papers (2010) and 1 article
	the company	Projects P3+P4 permit to	(2011)
	A topic discussed at the	build a typology of LSP's	
	(avagutive committee)	roles in SCI	
P5	New avenues for a	Have a 'revelatory' access to	No publication
15	systemic approach of eco-	a world-class company	(confidentiality)
	design after-sales services	Share very strategic	Inspired P7 and P8
	and reverse logistics	information good case study	inspired i / and i o
P6	A collaborative research	Validation of the SSC	Results published in 2 conf
-	project that led to test a	scanning framework	papers (2012, 2013) and 1
	"pilot" (up to end 2013)	Good qualitative data	article (2014)
	that turned into is an	Valuable strategic	
	effective "shared-service"	information sharing	
P7	Benefit from clarification	Learn from the many voices	No publication
	of new concepts, synthesis	in the panel (not all being	(confidentiality)
	of state-of-the-art,	"scientific" ones)	
	emerging research results,	Catch tendencies, new ideas	
	prospective views	Share very up-to-date	
DO	.	knowledge and signals	
P8	Incite managers to develop	Keuse of LIP $(P1) +$	No publication
	an open-minded and	scanning framework (P/)	(confidentiality)
	complex approach of	Know-now in knowledge	
	scanning	appropriable knowledge by	
		appropriate knowledge by	
		managers	<u> </u>

Table 2 – Ex post outputs of the research projects

Nota: (1) List of publications is available upon request. Research reports linked to the projects are not mentioned. (2) HSDM indicates if the projects, as far as we know, helped for strategic decision-making (HSDM). Before giving an overview of the 8 projects, it must be explain why we chose projects performed after 2000. Following the calls for more rigorous logistics and OM research at the end of the 1990's (e.g. Ellram, 1996, for case study in logistics), from 2000 we designed more carefully the research methodology of industry-academia research projects. The aim was clearly to improve robustness of research results and to have collected data with a quality that should not stop us from publishing in academic journals.

From the 8 projects, 5 were initiated by industry, 3 by academia. Six projects involved only one company and two project more than one: P1 was a jointed project with two companies and P6 concerned a group of companies (members of the same professional association). In both case (P1 and P6), the companies knew the industry partners before launching the project. The research projects were in interaction with different kind of supply chain (SC) members: 4 with LSPs (P1, P3, P4, P8), 2 with industrial companies (P5, P7), one with a wholesaler-distributor (P2), and P6 with a mix of industry, logistics, distribution companies.

Most of the projects mixed logistics, OM and/or SCM issues. As mentioned by Larson and Halldorsson (2004, p.18) "The unclear conceptual boundaries of SCM make it difficult to design educational and research programmes in SCM without large overlap with other fields such as logistics, marketing, operations management and purchasing". It is thus not easy to delineate the precise domain of each project.

What was clear is that every project had strong strategic issues. Most of the projects (5 out of 8) had a prospective / scanning orientation (P1, P5, P6, P7, P8), and had a direct connection with companies' strategy formulation (P1, P2, P3, P4, P7). Most projects permitted to think both about relationships between logistics strategy (IS) and strategic Logistics (sL) (Fabbe-Costes and Colin, 2003).

Two projects (P2, P8) were short ones (3 months), most projects were longer than one year (P1, P3, P4, P6, P7), P5 being intermediary (8 months).

Among the 8 projects, one can be considered as action-research (P1), 3 as 'classic' qualitative and/or quantitative research projects (P3, P4, P6), and the 4 remaining as knowledge sharing (P2, P5, P7, P8) with a mix of research production (state-of-the art, results transfer and prospective).

Concerning outputs, it can be noticed from table 1 and 2 that the 8 projects produced outputs generally in line with expected results. Some project can be considered as being more 'valuable' for companies, others for researchers. Almost every project (except P7 and P8 that are the more recent ones) leads directly or indirectly to publications (conference papers – most of them at Euroma or Nofoma conferences – and articles in peer-reviewed OM and SCM academic journals), sometimes not immediately after the research, not using the collected data and not directly related to expected results.

Looking back at the outputs for researchers, this type of projects have long-lasting effects and strong impact the overall researchers' agenda, probably because of the richness of the structured and, more importantly, the unstructured data researchers collect and the many ideas and questions raised during the course of the project. Most of the 'revelatory' data (Yin, 2009) could not be published, which is somehow frustrating, but enriched researchers' knowledge of strategic logistics, OM and SCM thinking and practices, orienting further research topics.

Findings related to industry-academia interactions

The in-depth analysis of the 8 research processes provides insights about industryacademic interactions in logistics, OM and SCM strategizing and organizing research projects (Whittington, 2003). Table 3 presents main results for the single case analysis.

Project	Main difficulties / key	Lessons for researchers	About dialogue
-	success factor		Co-construction
P1	Strategic objectives of	Learning process about how to	No experience of working
	companies were not	interact with "unknown"	together
	clearly communicated	companies in action research	At the beginning, a lack of
	(considered as too	projects	trust between the 2
	confidential)	Time for the project (short) had	companies and between
	Difficult to decide about	impact on methodology (and	companies and academics
	research orientation at	data quality)	=> dialogue was not easy
	each step (companies were	It is necessary to design ex ante	Importance of time to
	reluctant to make choices)	a robust methodology to have	tame each other and dare
	Quality of results	publishable data	co-construct step by step
	convinced industry partner		
P2	The company's objective	Credibility is important	Company attended a
	was clear and focused	Working with top managers is	public presentation of
	Role of academia was	challenging but permits to have	some of the results of P1
	clear but challenging	access to key strategic data	=> researcher was
			credible and dialogue easy
P3	Integration, SCI, were not	Clarifying concepts, getting sure	Being partners in P1,
	clear concepts for LSP1	that objectives are aligned is not	facilitated interactions and
	=> it was difficult to self	a lost of time	information in LCD1
	A fter discussion the main	Access to key informant is a key	and its alignets
	abjective of both parties	in particular for topics related to	Since I SP1 "bought" the
	was to gain in-denth	strategic issues	project no-construction
	understanding of what is	Robust clear and detailed	Interesting dialogue about
	SCL perceived as a	methodology helps "selling" a	the "surprising" results
	<i>complex</i> phenomena =>	project	(for both industry and
	ended aligned		academia)
P4	Having contact with key	A project not time consuming	LSP3 was a teaching
	managers in the company	for the company is quite easy to	partner in master program
	was helpful to "sell" the	sell	=> dialogue was easy
	project	Importance of debriefing	Company was not so
	Demand was only to	strategic issues raised by results	interested in the results =>
	spread questionnaires to a	with the top management	no co-construction but
	select number of persons		challenging discussion
D/		T ₁ · · ·	about results
P5	Confidentiality was the	It is important to overcome	lo sign a strict contract
	main problem for	irustration not to be able to	balage agents are to be in an
	nublish nor communicate	Understand that value of a	"open" knowledge sharing
	anything)	project can be in the experience	nerspective
P6	Coherent group of leading	Robust focus group method	Clear research objective
10	companies developing	produced very good data	helps maintaining the
	collaborative sustainable	Frontier between research and	research focus of the
	logistics projects $=>$ easy	consulting needs to be regularly	researchers' role
	to manage	reaffirmed	
P7	Clear role for researchers:	A panel is not the best situation	Polyphony in a panel is
	stakeholder among others	to an in-depth case study	rich and raise lots of ideas
	in a stakeholder panel	The panel experience is	and questions, it helps
	A panel, it is not a	stimulating but topics are not	'surfing over the wave' of
	'scientific' context	deeply studied => to develop	new trends and tendencies
P8	Important to get sure that	Important to be able to	Important to dialogue
	we shared the vision of the	communicate about complex	about the understanding
	expected outcome (not	concepts (sometimes adapting	of key concepts (e.g.
	best practices)	language)	scanning, eco-system,
	Clear demand from the	Useful to make company	innovation)
	chief executive	validate the 'production'	

Table 3 – About the industry-academia interactions during projects

Table 4 presents main results of the cross case analysis pointing out the results concerning dialogue and co-constructions at each step of a research project as well as the success factors facilitating both.

Project phases	About dialogue content	About co-construction	Influencing factors
First contact	Why launching and	At this stage partners	Reputation of partners
up to "go"	participating in the	can influence research	Capacity to communicate
decision	project?	orientation to align the	clearly about the project
	What about the topic, the	project with their	Ability to convince about
	potential methodology and	expectations, think	the project interest
	the expected outputs	about potential	Level of experience and
	Clarify the underlining	difficulties with	trust with the partner(s)
	concepts, theories	fieldwork, raise	Previous projects done
	Exchange can help	potential problems (e.g.	together
	finalizing the project,	related to	Inter-personal previous
	sometimes giving another	confidentiality, public	experience
	orientation	publications of results)	Easy access to decision-
			makers of both partners
Contracting	Be sure that objectives are	Do not buy projects	Previous projects done
	clear (prevent from	unquestioningly, except	together (e.g. vis-à-vis
	misunderstandings)	if it fits your plans.	confidentiality, ethics)
	Clarify the details of the	The objective is to	Previous experience in
	research process: steps,	design a feasible and	contracting for research
	duration, work-packages,	valuable project for	projects
	deliveries, support and	both parties, getting	l'emplates available to
	finance from partners, role	sure that the project can	limit comings and goings
	of industry partners vs.	need each partner s	support of jurists to
	results and publications	perspective (not	(e.g. risks)
Making the	Data and knowledge	Depending on contract	Access to and availability
research	sharing	agreement precise	of key managers and
researen	Traceability of the	definition of field	senior researchers during
	research execution	research choices	the project
	Encountered difficulties.	Execution of research	Degree of partners'
	how to overcome them	together	'interest' in the results
	Negotiate about 'quick	Making common /	Research skills of partners
	production' of results	controversial analysis	Research know-how
Direction -	Negotiate about	Taking together the	Research know-how
redirection	unexpected but necessary	decision about new	Strategic milestones for
	redirections	orientations	partners (deadlines to
	Making decision about	Analysing their impacts	produce results, to take
	time constraints and delays		decisions)
Results	Importance of debriefing	Some results cannot be	Critical vision of results
analysis	strategic issues raised by	obtained without	Ability to stand back and
	results with the top	working hand-in-hand	think about what each
	management	Results can be	partner learned
	What are the "surprising"	challenged by partners	
	results (for both industry		
	and academia)?	26.11	
Concluding	Debriefing: what about	Making a common	Interest for research
the project	satisfaction of partners?	return from experience	process and production
	What about the project?	about the project	Long-term vision of
	I nink about 'next' step?	Learning process	partnering in research

Table 4 – About the dialogue and co-construction during projects

As mentioned before, for the 8 selected projects, we were involved from the beginning of the contract negotiation, we participated to methodology design, data collection and analysis, and we were associated to every key decision in the research processes.

Even if each project was initiated by one of the partners (see table 1), the general problematic revealed to be of strategic relevance both for academics and practitioners. The discussions during the first steps of project researches helped in refining the research design in order to fit with the objectives of each party. In some projects, they were not fully aligned which was not a problem since what is shared is the project.

Working on refining together the research design, we often experienced the "unclear conceptual boundaries" between logistics, OM and SCM. The statement of Larson and Halldorsson (ib.) remains valid today. And this is true for every keyword of a research project (e.g. *integration* for P.3 and P4, *scanning* for P6 and P8, *sustainable logistics and sustainable SCM* for P5, P6 and P7). When researchers and practitioners work together it is worth checking they understand each other. If this is not done at the beginning of the project, the problem may occur later with incidence on the quality of the research. In-depth discussion of concepts (e.g. in P3, P8) fosters the sharing of visions improving interactions during the project and quality of its outputs. It is important, in particular when researchers initiate a project (P3, P4, P6), that the theoretical aspects do not hinder dialogue with companies. Each has to go towards the other.

When companies come to academia, in particular for those who are not used to work with researchers, they often look for 'best practices', ready-to-use or fast appropriable solutions. Underlining logic is there *are* 'best practice' (cf. ontology). Considering that strategic logistics, OM and SM projects needs a systemic approach and a reference to complexity thinking (in particular for scanning and prospective projects), some discussion were needed to check that the vision of industry partners was compatible (there is no 'one best way', one fits all approach). For those who were not so convinced at the beginning, but dared to make the project, they were happy to end with a more complex view of the initial problematic and news questions.

Interacting with companies, in particular when they are waiting for 'results' (e.g. P1), can lead to adopt 'weak' methodology (less robust than expected) to reach results quickly, but ending with data difficult to reuse for publications. Time can be an important issue vis-à-vis research quality. Academics' time horizons are generally much longer than practitioners, resulting sometimes in conflicts during the execution of the project. Common decision-making about such critical aspect of projects can prevent from dissatisfaction of both parties, leading sometimes to decide redirecting the project.

To interact about "strategic logistics and SCM" projects, it is necessary to have access to top managers (key informants). Since these projects include confidential information sharing, company needs to trust researchers; ethical behaviour is a key issue. Previous experiences with the partners were a success factor for P2, P3, P4, P5 and P7. Time is needed to convince partners to open the doors and share information.

For most projects, we worked under a contract on behalf of our university, specifying, among other points confidentiality and intellectual properties issues. What was considered at the beginning as a constraint, an administrative task and a waist of time, revealed much more important and useful that expected. The time (particularly long for some projects) spent to discuss about duration of the project, the expected results for both parties, the methodological choices, the different steps in the project and if the 'door is open' to redirection of the project, was not a "lost time". It was also important to state about what could be done afterwards in term of publications (an important point nowadays for researchers). Quality of collected data (P1), confidentiality issues (P2, P4, P7, P8) sometimes prevent from publishing results or data related to research project made in interaction with companies. However, publishing is not the unique value added of research projects performed in close collaboration with

industry. More important sometimes is to have access to revelatory data (P5), to feed one's scanning process (P7), to test the relevance of knowledge for companies (P8).

Finally, looking back at the overall panel of projects we analysed, we realized how interconnected these projected were because of the topics (e.g. P3 and P4 with SCI) or because of the partnerships (e.g. P1 and P3). P1 led to P2; P4 was built upon P3; P6 incited companies to launch P7 and P8. The related partners acknowledged how important dialogue and co-construction were to build confidence and create a sense of intimacy, as well as to develop a know-how working together.

Discussion / contribution

The results of our case analysis give some highlights about industry-academia interactions in research projects. They provide some guidelines to improve the management of such projects and the quality of their outputs for both parties. The results suggest that 1) the *co-construction* of such type of research project is a critical key success factor; and that 2) to support this process, more industry-academic *dialogue* leads to more valuable results for both parties.

Co-construction helps partners to clarify and align expected outcomes, to co-design the research process (specifying the managers' and researchers' roles) and to collaborate in the research execution. The dialogue supporting the co-construction permits to show off *controversial points* (e.g. having fast results/having time to collect good set of data), or ontological and epistemological *mismatches* between researchers/managers visions, both being source of potential conflicts (e.g. about the 'reality' of best practices).

The dialogue can help researchers to refine the reasoning mode and the methodological choices, improving the feasibility and the rigor of the project (a key point for publishing action research, Näslund et al. 2010). Adopting a systemic approach, we design a framework of interactions between the key topics of dialogue identified in our set of research projects.

The paper provides guidelines about how to manage industry-academy interactions in strategic logistics, OM and SCM research projects. The research identifies a list of points (see table 3 and 4) partners launching a common research project could consider and suggests to take time to dialogue, using the dialogic principle (Shotter, 2008), to co-construct the project... not a wasted time considering differences between academic and practitioner (Bartuneck and Rynes, 2014).

In line with the underlying constructivism epistemology of our research (Avenier, 2010), our paper does not give any 'best practice' but proposes principles for practicing research.

Conclusion

Some limits can be mentioned. We have not selected projects that failed at an early stage. Long negotiations for two important projects with leading companies broke down when the two parties were unable to agree on the resources (finance and personmonths), intellectual properties and confidentiality issues). Some lessons from these 'failures' could enrich results.

We did not include supervised PhD projects with high interaction with companies during the period 2000-2015. Since it is the PhD student who was interacting, it would be necessary to collect his/her point of view to be able to include these cases. This could be done when expanding the paper.

Some more work is needed to develop a comprehensive framework and to discuss it in the light of previous work in organisation studies, expanding the discussion section of this paper.

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