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Abstract	This study pertains to the dynamics of interculturality in a context of offshore multicultural virtual teams offering IT services. Interculturality is conceptualized as the interaction between individuals and not just the cohabitation between various national cultures. We draw on the concepts of social regulation, which represents a process of social rule-making, and observational learning to propose a conceptual framework based on three research propositions that analyses the dynamic relationship between culture and intercultural learning accumulated via social regulation. In this context, we conjecture that interculturality in offshore virtual teams is not only expressed through electronic communication but also through the way of perception and execution of daily work tasks. In this research-in-progress paper, we use secondary data to explore the nature of the proposed framework.

Keywords (separated by '-')	Interculturality - Offshore virtual teams - Social regulation - Intercultural learning

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Interculturality and Virtual Teams in IT Offshoring Context: A Social Regulation Theory Perspective

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1 Introduction

In an economic context characterized by competitiveness and instability, organizations need to establish efficient collaboration at a global scale regardless the geographical, social, and political barriers they face [1]. Information Technology (IT) offshore outsourcing and specifically the labor-intensive information systems (IS) services, is the result of organizations' need to widen their field of activities by collaborating with other partners beyond the geographical borders when relevant know-how is internally lacking and/or expensive on the local market [2]. However, offshore IT services are associated with important challenges, such as ensuring efficient communication and cooperation among the project team members.

In the context of offshore IT services, virtual collaboration occupies a place of choice [3, 4]. Indeed, the last two decades showed a surge of the interest from organizations to use virtual teams (VT) for systems development services [5]. This can be explained by the flexibility these teams provide to the organization by avoiding territorial and temporal constraints. Team members work across major time and geographical zone differences and across cultures. Some of them may never meet face to face, yet they form effective teams through some socializing processes to improve

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collaboration during the project lifecycle [6]. Moreover, the construction and the maintenance of social ties are important for the virtual collaboration [7]. These aspects must be better analyzed to improve our understanding of the human-related issues and their impact on a successful collaboration [7].

There is also an important interest from the IS scholars that try to understand the multiple facets of these teams, considered as the work arrangements of the future [8]. These researchers are interested in answering questions relating to members' coordination [9] and communication [10, 11]; work effectiveness [12] and productivity [13, 14]; conflict management [9] and finally, related to the cultural diversity in virtual collaboration [11, 15, 16]. While cultural diversity of the virtual team members can add to the knowledge base of offshore-based IT work through enhancing the team creativity and problem-solving ability, it can also emerge as a hurdle to effective communication, collaboration, and knowledge sharing [17–20].

Interculturality – the interaction between individuals and not the cohabitation between various national cultures – is one of the important topics studied in the research on virtual teams [21]. The literature on organizational culture and intercultural management suggests that: (1) the relationship between virtual teams and interculturality is a subject that requires a special attention in order to analyze team effectiveness and work productivity [15, 21, 22]; and (2) most of these studies' conclusions regarding different approaches for intercultural management are based on Hofstede's perspective on national culture [10, 15, 23]. These studies convey images of culture as being static and of individuals as being passive recipients of their 'cultural genes' [24].

Despite the importance of Hofstede's work, we consider that it is necessary to go beyond this perspective by analyzing daily activities of the individuals within virtual teams in terms of intercultural manifestations while pursuing common project goals. We adopt the view that considers virtual team members as being individuals who continuously redefine their culture through interaction with the others, thus becoming intelligent actors who shape their culture (and others') and enrich it during a process of cultural learning [25]. This process aims at providing an individual and a team cultural balance. In this research, we advance the following research questions:

How do members of globally distributed IT offshore outsourcing teams redefine and enrich cultures and intercultural experiences while engaging in daily practices in a virtual work context?

To answer this, we draw on the Social Regulation Theory [26] and on Social Learning Theory [27] to propose a conceptual framework based on two concepts:

(1) *Social regulation,* as defined by the Social Regulation Theory (SRT) [26], represents a process of social rule-making. The SRT, along with the sociological works of Crozier and Friedberg [28] represent interesting theoretical lenses in the French literature about sociology at work. Recently English-speaking scholars have started to manifest some interest in the SRT perspective [25]. The SRT aims to fill what Reynaud considers as a gap in the Strategic Actor Theory [30] in the sense that it does not explain enough the mechanisms that influence the production, the maintenance, the application and the rejection of rules in the organizational context [31]. The SRT suggests that to be 'social', a rule entails some degrees of constraint and voluntary acceptation by the social actors. The main tenet of SRT states that the phenomenon

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under study is not shaped by physical events but by the actions and constraints that weigh on these events [26]. The SRT may help us to better understand how actors in virtual teams manage their decisions and how their cultural background may impact these decisions.

(2) *Observational learning* as described by the Social Learning Theory specifies that a person learn about another person's behavior through observation and modeling processes in a social context.

The framework provides the theoretical foundation for a qualitative case study (in progress) of a Canadian bank (hereafter called the Bank) in which the upper management recently signed an outsourcing agreement with a world leader in business and IT services provider (hereafter called the Service provider). In the contract agreement, the Service provider will offer offshore application development and operation services to the Bank by using resources from India and Brazil. We will conduct semi-structured interviews with the main stakeholders involved in the virtual collaboration. Specifically, we will assess how members of virtual teams implicitly and explicitly evaluate intercultural manifestations while pursuing common project goals.

The two main contributions of this research-in-progress paper are: (1) For the IS literature on virtual teams in an offshoring context, will propose a conceptual framework based on the dynamic relationship between culture and intercultural learning accumulated via social regulation; (2) For practitioners, the model will help managers to take into account the complexity of the virtual interculturality by enticing them to go beyond rigid cultural membership and implement mechanisms of intercultural learning within the virtual teams they manage.

Our partial empirical findings will be presented at the workshop (based on the fact that at the time of the writing, the outsourcing project was in the initial phase of implementation).

2 Influence of Culture in Virtual Teams in Offshoring Context

Virtual teams become today an integral part of many organizations that are increasingly engaging in offshore business models [32]. The evolution of the Internet-based technologies has allowed organizations to establish business partnerships across geographical boundaries. Teams working across national borders and virtual organizations have become a reality in offshoring arrangements. Organizations increasingly delegate IT intensive business activities, such as resource-demanding operational tasks and development projects, to external service providers outside the home country. In this paper, we define a virtual team in offshoring context as a group of individuals who are globally distributed and culturally diverse, and who communicate and collaborate either asynchronously or synchronously (in real time) mainly through IT [10]. Cultural diversity of offshore virtual teams emerges from team members' different national, organizational, and professional cultural backgrounds [33]. These multiples backgrounds refer to multiple organizational, functional and cultural boundaries that virtual teams should manage in an offshore context [34].

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The literature suggests that culture is a crucial factor impacting the performance of global virtual teams in terms of: communication [19], coordination [16, 35], managing conflicts [36], building trust [37], and sharing knowledge [38, 39]. According to Abbot et al. [32], success of offshore IT projects often depends on achieving mutual cultural understanding, based on which the collaborating organizations can build trust and share knowledge. Indeed, in a list of the "top 12" offshoring issues, scholars consider the effects of cultural diversity to be number two (after strategic organizational involvement) in importance [40], while cultural compatibility is suggested to be a key issue when considering cultural issues in an offshore IT project [41]. In the context of offshore teams, national culture is considered as the main challenge to successful collaboration [34, 41] because of the differences between societal characteristics, which impact the interactions between members of the distributed team.

A number of scholars consider that virtual context of the team collaboration can be a source of cultural conflicts and misunderstandings due to their 'virtual' approach to collaboration and trust building [43, 44] and to the development of a sense of belonging [45, 46] and group identity [47–49]. Therefore, a growing number of scholars and managers are interested in the intercultural dimensions of virtual teams.

Several cross-cultural IS research studies focus on analyzing the impact of national culture on systems development and implementation. A number of scholars have emphasized the importance of taking into consideration the multi-level character of the socio-cultural context of virtual IT teams work [33, 50–52]. For instance, in their qualitative study, Barrett and Walsham [53] studied a global software development project involving a Jamaican insurance company and an Indian software company. Data analysis suggested that the two national cultures played crucial roles in relationship challenges during the project. In another study, Sarker and Sahay [54] analyzed the work of virtual teams involving U.S. and Norwegian students. The study outcomes suggested that the cultural differences were reflected in divergent communication styles resulting in misunderstandings. Also, Nicholson and Sahay [39] argue that cultural differences may constitute an obstacle to efficient knowledge sharing in global IT projects because part of the knowledge is culturally dependent.

Culture is a transversal concept that encompasses several human dimensions: beliefs, values, behaviors, and interpersonal communication [55, 56]. The definition of culture is very complex and every dimension cannot be treated without a deep comprehension of the scholar's methodology and epistemology, population under study and the level of culture analyzed (regional, national and organizational). For example, Hofstede represents culture as a collective mental programming of minds that differentiates between groups [23]. This "software of mind" automatically influences reaction and behavior of any individual in a work context depending on the cultural level [57]. In a different vein, Hall [58] uses the three dimensions of the human communication – *words*, *material things* and *behaviors* – to understand national culture and concludes that communication is culture and culture is communication. Adler [59] proposes a model to understand national cultures based on the relational abilities of individuals, such as their relation with nature and the world, with their community, with space and time. Finally, Hampden-Turner and Trompenaars [60] propose a model to understand cultural differences by analyzing how people try to solve problems in a work environment.

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These studies have a common goal: to identify a specific number of cultural dimensions that would explain the cultural diversity and to propose a series of mechanisms to manage this diversity. This line of research suggests that culture, as a "cultural programming" attribute [61], systematically influences human reactions and behaviors. However, these conceptualizations of culture do not seem sufficient to capture its complexity [16]. Most of the IS literature adopts this perspective and focuses on the dimensional approach to culture in virtual teams. National cultures are considered to be homogeneous, fairly stable and well delineated. The 'cultural distance' between headquarters and a subsidiary, or team members who are collaborating across geographical boundaries, (i.e., on-site and offshore), is assessed based on Hofstede's cultural variables: power distance, individualism/collectivism, uncertainty avoidance, femininity vs. masculinity, and short or long term time orientation, in order to identify the potential managerial challenges of the cultural distance in this type of business arrangements.

In recent years, this perspective on culture has been criticized by a number of scholars (e.g. [16, 62]) who propose a new approach for studying cultural differences in a global business collaboration context. Going beyond cultural dimensions and focusing on the social interaction and the negotiation of meanings [63] in virtual teams gives opportunity to study how global virtual teams with different cultural backgrounds collaborate, try to understand and work out their cultural issues and create a common ground [64]. Such a perspective will help researchers to find answers to questions like: How do team members socially create images of each other at an individual, organizational and national level?

In sum, two main conclusions emerge from the extant literature:

(1) Cultural diversity and interculturality in virtual teams are studied by taking into consideration only the interaction between individuals from different national cultures, without analyzing how multicultural individuals interpret, explain and engage in work practices in their context of virtual collaboration. Therefore, there is lack of studies to shed light on how members of virtual team express interculturality during the process of virtual collaboration. Our study looks at eventual forms of cultural adjustments, negotiations, and control that virtual team members create in order to successfully accomplish their task at hand. Going beyond national culture schematization we try to better understand how virtual team members use their cultures and how these cultures are being embedded in the work context and transformed by the accumulation of professional experiences. In this study, culture is considered as what influences individual actions through an explicit and an implicit symbolic heritage and identity which create a sense belonging to a community [65, 66]. Culture is also formed by the consequences of these individual actions and it is in this sense evolutionary and not static [67, 68]. In this vein, culture is what directs people actions and affects the result of these actions at the same time.

(2) The literature does not pay enough attention to the accumulation of intercultural experiences, or what we call an *intercultural learning*. In virtual teams, members build up a significant multicultural experience in time; therefore, we consider that it would be interesting to see how members mobilize their own past experiences to solve intercultural challenges. We define the *intercultural learning* as being an evolutionary

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process in which cultures are mutually transformed and enriched to adapt to the realities of a specific offshore collaboration context.

3 Theoretical Framework

To understand how multicultural virtual teams interpret cultural diversity and how they manage their daily practices by transforming their culture and the others', we draw on the *Social Regulation Theory* [26] and on the *Social Learning Theory* [27].

3.1 Social Regulation Theory (SRT)

This theory is less known in the Anglo-Saxon world and the concept of *régulation* has a French connotation, represents a process of rule-making – creation, adjustments, transformations and negotiations of rules [69] – and it is not synonym with the English word 'rule' [29]. The SRT considers that every individual is a powerful active actor, which tries to manage the organizational environment by adapting it to his objectives and needs. To achieve this, an actor will use several formal and informal strategies [26]. In the context of *regulation* (process of rule-making) actors seek to transform their environment by engaging in a process of creation, implementation, adjustments and resistance to work rules and norms [29, 70]. The main goal of the SRT is to understand social rules in an organizational context and their creation, implementation, maintenance and decline (the *regulation*) and how collective actions are created and maintained despite individual differences [31]. Reynaud's theory is about actions and their meanings that emerge from action's constraints. The SRT considers three types of *rules:*

(1) *Control regulation* – represents vertical rules that an organization creates and imposes to be respected and practically the actors cannot negotiate them. Control rules are synonym to rational thinking and represent the 'how to do' the daily tasks (Reynaud, 2003).

(2) *Autonomous regulation* – some organizational groups make their own rules that are accepted by members to mitigate the *control regulation* and "while not formally binding, tend to become so gradually" [29, p. 312]. Generally, autonomous *regulation* is informal and unwritten [26]. For example, in Dupuis' study [69], Bolivian miners create their autonomous rules to identify whether a new miner can be integrated into their group or not. The miners decide that the successful candidate should have a good reaction about stress and any sign of a potential collapse of the mine. Thus, they put the candidate through several informal tests that the candidate must successfully pass. So, every group will try to create and transform their own rules to alleviate organizational constraints.

(3) *Joint regulation* – is based on common negotiations that give place to new or transformed rules. Syndicalism represents *regulation* through joint rules [69]. Joint *regulation* tries to mitigate control and autonomous rules. Actors will engage in trade-offs and negotiate with the main objective to maintain some cohesion [26].

According to SRT, these three types of *regulation* will influence the work environment of organizations and groups. Human agency means constraints, therefore

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automatically means *regulation*. The question is: what are the mechanisms that actors mobilize to avoid, transform, create, negotiate or reject rules of work? TSR proposes three main *regulation* mechanisms: legitimacy, agreement, and sanction. These mechanisms reflect what the theory calls *social constraints*. *Legitimacy* is the recognition of the rules as being legitimate by the actors. Like rules, the legitimacy is in a continuous creation and recreation and can be denied or negotiated [26]. *Agreement* represents the result of negotiations that gives legitimacy to negotiated rules [26]. The agreement may concern formal or informal negotiations between groups, individuals and organizations [26]. *Sanction* is defined as the response to what actors consider as a deviance (rejection). So, if the rule becomes legitimate, actors will temporarily accept it and if it is not legitimate, they will reject it. In the context of virtual teams in offshore collaboration context, the team members will engage in a rule-making process (*regulation*) in order to adapt to the offshore collaborative work constraints. Thus, we propose two research propositions:

Proposition 1. The members of multicultural virtual teams will try to adapt to the existing work context by expressing their cultural needs through a process of adjustment and/or negotiation of some of the work rules.

Proposition 2. Dialectical relationship between team members' resistance to control rules and *regulation* mechanisms used by the management will influence the effectiveness of virtual collaboration. Team members will try to transform some of the imposed rules, which they judge to be not coherent with their cultural background.

Virtual team members, in an offshore arrangement, will accumulate intercultural experience over time through *regulation* and by observational learning of others' cultural background. Thus, is the *regulation* a facilitator for intercultural learning?

3.2 Social Learning Theory (SLT)

The Social Learning Theory [27] is applicable in an intercultural virtual team context because it focuses on the accumulation of individual experiences and what individuals can interiorize as practices and learning [27, 71]. The SLT provides the analytical tool to study how people learn from each other, by observation, imitation and behavioral modeling [72]. According to this theory, human behavior is based on observational learning through modeling "from observing how one forms an idea of how new behaviors are performed, and how on later occasions this coded information serves as a guide for action" [27, p. 22]. Thus, people can learn new information and behaviors by observing other people. In our study we are interested by the concept of *observational learning*, which suggests that people learn by observation and imitation while in interaction with other people [27, 73]. Individuals develop their behaviors in function of their modeled behaviors, environment and their personal factors [71]. In the literature on distributed and virtual teams, the concept of "observational learning" was rarely studied [73, 74]. In the context of virtuality, observational learning refers to the analysis of team e-communication and e-interactions [73]. In the context of an offshored team we operationalize observational learning as members' modeling, interpreting

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and imitating others' behaviors to construct knowledge about themselves and about others [74]. These actions aim at using existing cultural diversity to improve collaboration among team members.

Therefore, the main tenet of the SLT is that the process of learning is not binary or deterministic; individuals play with their environment, personality and behaviors to learn and accumulate learning [75]. The environment constitutes an enabler of the process of integration and recognition of an individual in a specific group [75, 76]. In the context of interculturality and virtual work, the concept of observation learning provides us the means to study how team members learn new behaviors by adjusting themselves to organizational work rules that are defined by *regulation* and others' cultural background. Thus, we advance a third research proposition:

Proposition 3. To accept, adjust to, and eventually engage in negotiating the *regulation*-based rules of the virtual team (control, autonomous and joint), a member will engage in cultural observational learning by assessing the work environment while interacting with the rest of the team members.

4 Methodology

Given the exploratory nature of our research in the sense that we are looking for how the research question is applicable in the reality of practice in VT [77] and the still limited evidence available on the topic that we intend to analyze, we adopted a case study approach [78]. Our research objectives are to investigate how team members make sense of cultural diversity and organizational rules.

The case study approach will allow us to explore interactions in VT collaboration globally and deeply [79]. Moreover, the case study approach is pertinent to analyze the complexity of human reactions by considering their evolution in time [78, 80] and to observe the phenomenon in its real environment where it happens [81]. The use of one case is not enough to generalize findings but the richness of the data gathered could be applied in another industry context.

The setting is a Canadian bank engaged in an outsourcing (offshoring) contract with a global IT service provider. The latter will offer offshore application development by using a team of 66 IT professionals from India and operation services by using resources from Brazil. The virtual team members will constitute our main source of data. We will use two sources of data: interviews and archives. We will conduct semi-structured interviews in which we will assess how team members implicitly and explicitly evaluate how they adapt to the client's work rules and to other members' cultural background. In early December 2013, one of the authors spoke to one of the team managers from India and validated the interview protocol. An interesting fact came up during the conversation. The Indian IT professionals use synchronous communications with their colleagues from Canada. This means that the Indian team members would work during the night (there is an 11 h difference between Eastern Canada and India) in order to collaborate with the Canadian members in real time. According to the Indian manager, this approach was preferred instead of an asynchronous way of communication. The reason was based on previous experiences with

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other clients when it took sometimes more than 72 h to solve a programming issue during the software development process or just a normal hardware technical problem.

The interviews will be crucial for understanding the inter-organizational dynamics of partnership and interculturality. We will complement the individual data from the interviews with archival documents such as project-related documentation (e.g., minutes of meetings, progress reports, technical documentation pertaining to the software development process, and e-mail communication between team members) that will fill potential gaps in the interviewees' memory [82, 83].

The case was selected because of three factors: (1) the importance of the organization as a large company in Canada and the fact that more and more of their IT services are offshored in India and Brazil; (2) Access granted by the company to conduct interviews with the VT members from Canada (client), India and Brazil (service providers); (3) The possibility to longitudinally compare three cultural contexts which will allow us to make multidimensional analyses about culture, organizational and national context, rules of work, negotiations, adjustments and intercultural learning as explained before. This approach will allow us to assess data from each interviewee and find out if there is any evolution in their perception about multiculturality, work rules and intercultural experiences.

Due to the fact that at the time of the writing of this report (end of January 2014), the access to the setting was still in the early stages (identification of the participants, getting access to documents), we decided, for illustrative purposes, to validate our conceptual framework with secondary data [84]. The objective is to explore the pertinence of the research question, the theoretical framework and to help us to identify the future steps of the research. To this end, we used three cases studies of virtual teams in outsourcing/offshoring contexts.

The first case (Case 1) was selected because of the richness of the narratives and the interviews about multicultural VT in an offshoring context. The description of the work context, the actors and their tasks in this case are pertinent to illustrate the research question. The case is based on the stories narrated by employees about the characteristics of several IT virtual and multicultural teams of the company Tieto Oyj [85]. This company, which operates in Northern Europe, Germany and Russia, provides IT Research and Development (R&D) as well as consulting services in different industries like forestry, healthcare, and automotive, as well as in telecom and media. In this study 10 employees from different countries of Northern Europe were interviewed during 2009.

The second case (Case 2) was conducted by the Center for Effective Organizations at the University of Southern California [1]. It presents the results of a qualitative case analysis of data gathered from several multicultural virtual teams from eight organizations. For the purpose of our article, we only focused on excerpts from interviews with members of three virtual teams: (a) Team 1, composed of 12 members from 6 organizations from different European countries (b) Team 2, with 21 members from 4 organizations; and (c) Team 3, with 10 members from two global automotive organizations in US and Germany.

The third case (Case 3) was conducted in 2010 by Culture Wizard [86] and represents a large study covering 1592 respondents based in 77 countries. This is an intercultural training consultancy based in New York composed by several researchers

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and practitioners specialized on intercultural management. Even though this study is quantitative, in order to triangulate some of the quantitative-based conclusions of the study, the report of the study includes several comments from the survey participants.

5 Discussion

5.1 Social Regulation and Interculturality in Virtual Teams

The secondary data suggests that cultural differences are a major challenge in a VT context. As Proposition 1 suggests, team members try to express their cultural needs and expectations by some forms of adjustment or negotiation of rules. For example, members try to create their own autonomous or joint *regulations* to make their work environment better even if the context of virtual work is controlled. In Case 1, some respondents react to control *regulation* by trying to adjust it, or even transform it. The main motivation is to facilitate integration, 'feel good' at work, and push managers and colleagues to understand cultural differences in order to avoid conflicts and create synergy. For example, in Case 1, Zimmermann [85] illustrates the case of a VT member who tries to have an informal contact (beyond the relations sanctioned by the official work norms) with other members in order to create synergy and to better understand their cultures. This member finds out that formal procedures do not encourage team members that come from different countries, to understand others' cultures. Other respondents in Case 1 convey their frustrations with their managers that are unable to understand their cultural needs. To deal with this situation they try to explain to the managers that they are culturally different and these differences are legitimate and do not hinder their work commitment.

> *"[Managers have to] create an open environment where it is ok that we don't understand why we do it in this way or what do you want me to do to make this work so create an open dialogue" (Case 1)*

Data from Case 2 and Case 3 suggest that cultural diversity is also an important challenge in a VT context. This challenge is reflected by ongoing negotiations for a joint *regulation* among team members. According to TSR, a joint *regulation* will help the actors (team members) to reach an agreement on how to learn to work together and understand each other by developing mutual cultural acquaintances despite their different interests. The interview excerpts suggest that team members realized that different personal interests and cultural needs are conducive to negotiations, explanations, power plays, and eventual transformations of the work rules:

> *"The collaboration has been very difficult because partners have their own interests and comprehensions and they pull the project toward their interests" (Case 2)*

> *"Virtual teams can be successful if the expectations and leadership are clear and the members are willing, able, and committed to making the time for meeting despite of differences [...] We need to understand that though we are globalizing, we are still different, we have asymmetrical power, economic well-being, and ethnocentricity among different geographical units" (Case 3)*

Respondents in Case 3 "found virtual teams more challenging than face-to-face teams in managing conflict, making decisions, and expressing opinions" [86, p. 3].

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The use of words like "conflict", "expressing opinion" and "making decision" can refer to eventual processes of formal or informal negotiations in which actors engage in order to tradeoff with other members from other cultures. All of these characteristics suggest that there was a need for negotiations (joint regulation) in order to manage conflicts, make trade-offs, and clearly formulate agreements about a common way to work together. Unfortunately, more details were not present in the interviews from Case 3 to support the description of the eventual negotiations between the team members.

Data from Case 2 and Case 3 imply that autonomous *regulation* is present and it is reflected in actors' actions to formulate their own informal processes from collaboration and to make managers aware of their cultural needs.

> *"One of the ways to build [intercultural collaboration] was to help out with each other's task as much as possible. Do it in a subtle way. Take something off line and make some suggestions, then you're not treating their position and you are building collaboration" (Case 2)*

> *"We have created a virtual lunch once a month that co-workers [from different cultures] can voluntarily attend…This has helped in building rapport with co-workers" (Case 3)*

These processes of *regulations* reflected in the interviews data refer to what is conjectured in Proposition 2, that is, actors will try to resist, formally or informally, to social regulation mechanisms (sanction, agreement, and legitimacy) used by the management by transforming some of these rules. Therefore, a VT environment is challenging when control *regulation* is widely dominant and by using this type of *regulation*, managers will try to eliminate any potential source of miscommunication and conflict caused by cultural differences.

In spite of the interculturality being considered by managers a source of diversity that may enhance team's competitiveness, they will still use different mechanisms of control to reinforce standard work rules. The interview excerpts illustrate how managers use sanctions to legitimize why VT context should be regulated.

> *"When you work you shouldn't focus on the differences but focus on that we're all doing business and business is still quite common in all countries. Yes, we are a bit different in some way…but when it's about how we run projects I think it's the same eve" (Case 1)*

> *"In an international environment this [cultural difference] doesn't matter. It is only visible how one is acting and working. Obviously a balance between cultural diversity and finding common ways of working needs to be distracted from work." (Case 1)*

> *"You should form a new business-culture in the beginning of working together, i.e. new rules, like in a business game at school" (Case 1)*

> *"The more cultures represented on the virtual team, the greater the tendency to establish strict control mechanism" (Case 2)*

5.2 Intercultural Learning

The data analysis of the three cases supports Proposition 3 and suggests that actors learn about intercultural interactions through a set of accumulative experiences. In fact, members accept, adjust, and eventually engage in negotiating rules (control,

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autonomous, and joint *regulation*), that will allow them to learn about the others' cultures through an ongoing observational process. This might explain why interviewees in Case 1 and Case 2 do not consider culture as being a rigid code of conduct. They feel that they are equipped with a cultural baggage that allows them to enrich others' culture and even transform it. Therefore, by applying Social Learning Theory [27] in an intercultural VT context, we argue that actors can learn about cultural diversity and its challenges by engaging in the observation of the work environment and by decoding information through the interaction with actors that have different cultural backgrounds:

> *"Learning my own (culture)… makes it easier for me both to understand and accept differences and adapt to different situations and not be too surprised or upset that we are different, but rather appreciate the differences […] They (intercultural experiences) were an eye-opener how different cultures work" (Case 1)*

> *"If you look at the outcome, the products or concepts coming out of it, it is not very high. If you look at the outcome of the project, what is the network in Europe developing, how are the people interconnecting, then the outcome is very high. People are learning very much about each other and different cultures and how people deal with problems" (Case 2)*

Therefore, we can argue that *observational learning* is very important in this context because it helps actors to: (a) better understand other members' cultures and the sense of control regulation (commitment and agreement); (b) try to create autonomous rules to adjust control regulation and feel more satisfied and recognized at work. Terms like 'to be aware of', 'how to see organizational hierarchies', 'to challenge managers' are used by respondents in Case 1 to illustrate the outcomes of the observational learning:

> *"If you're not aware of whom you are how your way of working is and acting with others then it's going to be difficult. So the first thing is to be aware of oneself and then how to work with other cultures" (Case 1)*

> *"It's a way how you address people, how you talk to them, how you see organizational hierarchies, how do you approach your colleagues, do you meet them outside of work, do you challenge your managers, is that ok if you challenge them, how do colleagues react if you challenge their ideas" (Case 1)*

While rich in insights about the nature of the interculturality dynamics in a VT context, the secondary data from the three cases provided just an illustrative support for the three proposed research propositions. However, this exercise gave us evidence that using our conceptual framework to analyze virtual team members' cultural differences when they engage in activities to provide offshoring IT services may allow us to shed new light on a complex phenomenon.

6 Expected Contributions

This study will contribute to the IS literature on VT in an offshoring context by providing a different theoretical lens to analyze interculturality in virtual collaboration. The major contribution of our paper is that it proposes a conceptual framework to

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assess interculturality challenges by evaluating the intimacy of work and the interactions among team members. This approach is different than the traditional one that reflects a binary mapping of cultures (culture A versus to culture B), which is already widely present in intercultural management literature. Our conceptual framework suggests that interculturality in offshore virtual teams is not only expressed through e-communication but also through the way of perception and execution of daily work tasks. Analyzing how VT members receive, interpret and react about work rules to deliver IT services is important to better understand intercultural challenges in a virtual collaboration.

Moreover, this paper reveals the dynamic character of cultures and how VT members are active actors who express their cultural needs and frustrations by engaging in the transformation of others' cultures through intercultural learning. This conclusion will help IS literature on offshore virtual teams to change the way of considering cultures as a static component of individuals. Finally, our theoretical framework suggests that IS and intercultural management literatures should take into consideration aspects like *regulation* and learning in analyzing VT and cultural diversity.

We expect that the results of our study will also have implications for practice helping managers to take into account the complexity of the virtual interculturality by enticing them to go beyond rigid cultural membership and implement mechanisms of intercultural learning within the virtual teams they manage.

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