
Uncovering the consonance between “play” and organizational learning: evidences from an Italian ‘Play Factory’

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Structured Abstract

Purpose – The paper aims to investigate learning processes in organizations characterised by a corporate culture (Hellriegel et al., 2004; Harrison and Stokes, 1992) that might be labelled “play culture”. The paper explores the extent to which a “playful approach” might generate and affect learning processes among organizational members. The paper aims to show that a playful culture is able to support both generative learning processes and double loop ones. It explores how the design of physical spaces intersects with a ‘play culture’ and how this impacts on socialization processes and the enhancement of knowledge creation.

Design/methodology/approach – The article research design is based on a case study approach. The paper focuses on a project named “Play Factory”, developed since 2008 by an Italian small firm (Loccioni Group). Our case study is based on a mixed method approach consisting of three main sources of data: 1. Interviews with organization managers that have implemented the *Play Factory*; 2. Participant observations, where the researcher becomes part of the everyday working life; 3. Archive documents (annual reports, etc.) from the company. The benefit of this type of inquiry is that it permits a detailed understanding of the phenomenon through a richer data collection

Originality/value – The article wants to fill a gap in the current organization studies literature, in order to further investigate the relation between play culture and learning. Indeed, traditional literature has focused on a description of learning characteristics, whilst less has been done to understand which types of tools enhance learning processes. The analysis shows that in some organizational contexts, play can become a powerful tool. A culture of play can be conducive of generative learning processes, thus shaping working practices.

Practical implications – This papers shows the effects of “play culture” on learning processes, along with their physical and spatial consequences and expressions. Indeed a “play approach”, especially if synergized with other interventions oriented to create BA architectures, seems to help organizations to become physical places that stimulate knowledge creation and SECI process triggering and enhancement. Finally, starting with this successful case, it would be possible to show the importance of play culture in supporting creative intelligence inside organizations. It would be then possible to draw some conclusions that can be extended to other organizations, especially regarding the relationship between play culture and generative learning.

Keywords – Organizational learning, Ba, Play culture, Play organization, Sustainability.

Paper type – Academic Research Paper

1 Introduction

A wide and varied literature has investigated play activities as a learning catalyst in human sciences field. However, except for few authors (Costea et al. 2007; Fleming, 2005; Warren, 2002), the topic has been poorly researched by scholars writing in organizational fields.

Scholars writing from different disciplines, such as sociology, psychology or anthropology have recognized the relevance of the ludic dimension. For instance, many psychologists have suggested that play is an essential part of human development and as such, deserves not to be underestimated (Carr, 2003). According to Huizinga (1950), play represents a necessary condition to learning throughout human evolution. In his popular essay, Huizinga discussed about “homo ludens”, and he traces back in the man who plays, the necessary condition to become “homo sapiens”, the man who knows.

Organizational researchers have recognized that play within organizations can have significant benefits such as learning, personal fulfillment, and even performance (Starbuck and Webster, 1991; Hatch, 1999). Fortune-500 companies were consulted on how to incorporate play into businesses and it came out that various companies such as

Google, Patagonia, Gore, Motorola, and Du Pont encourage their employees to use up to 20% of their work time to play freely with new ideas (Kark, 2011)

In sociology researches, play is considered as a process nurturing a dynamic relationship between the self and society. The individual who plays imagines the self “as if” it were other, creating a kind of estrangement (Carr, 2003): this peculiar flexibility of play activities allows new possibilities to be imagined and to come real, increasing people adaptation and evolution capability (Statler, 2009). When it comes to organizational contexts, the role of play activities and a playful culture should not be underestimated. According to the earlier mentioned psychological literature, play activities help in developing individuals’ cognitive and emotional capacities necessary for effective, productive work.

This paper aims to investigate learning processes in organizations characterised by a corporate culture (Hellriegel et al., 2004; Harrison and Stokes, 1992) that might be labelled as “play culture”. The paper explores the extent to which a “playful approach” might generate and affect learning processes among organizational members.

In this vein, the article wants to fill a gap in the current organization studies literature, in order to further investigate the relation between play culture and learning. We aim to show that a playful culture is able to support both generative learning processes and double loop ones. In this regard, a culture of play can be conducive of generative learning processes, thus shaping working practices.

This paper is structured as follows. The first section explores the concept of play within the managerial literature. The focus then moves to the literature on organizational learning, looking in particular at Nonaka and Takeuchi’s (1995) SECI model and “learning places” called Originating BA. The empirical section analyses an Italian small firm and it focuses on a project named “Play Factory”, developed since 2008 by this company.

Considering this case study, it would be possible to describe empirical evidences of “play culture” effects on learning processes, along with their physical and spatial consequences and expressions. Indeed a “play approach”, especially if synergized with other interventions oriented to create BA architectures, seems to help organizations to become physical places that stimulate knowledge creation and SECI process triggering and enhancement.

2 Exploring the connection between play and work

Play activities emerged as pivotal to develop imagination capability, helping children to distinguish between the real and the hypothetical; in this fashion adults can develop an ability to make an understand meaning within cultural contexts that are framed by more or less complex and explicit roles (Statler, 2009). Moreover, as play involves cooperative interaction, it has been conceptualized as a major organizing principle of human culture and civilization in anthropological studies. Indeed, certain types of play when socially enacted can enhance community building and develop a sense of communal identity (Kark, 2011). In this sense, although play may be considered unproductive because it doesn't result directly in any valuable artifacts, it can produce higher-order benefits at both a cultural and individual level (Statler, 2009).

The anthropological interpretation provides a group level approach to organizational play, that can be conceived to shape culture and identity of organization itself. In addition, at this level of analysis, sociological literature can lead to consider play in organizations as an activity through which people frame and adapt the social contexts and relationships necessary for work (Statler, 2009).

It follows from the above considerations that play and work could be two tightly intertwined concepts. Actually, the postindustrial revolution has firmly separated work sphere from leisure and play, to focus on organizational efficiency, rationalization, and profitability (Kark, 2011). Therefore "play" has been interpreted as opposed to "work". Nevertheless organizational culture (Schein, 1984) may represent and provide a general factor legitimizing or denying this opposite dichotomy. Indeed, as theorized by several authors (e.g. Harrison and Stokes (1992) or Hellriegel et al. (2004)), there are different kinds of cultures, some of which are more focused on trustfully and caring relationships and a sense of "camaderie" to build sense of belonging and commitment, along with self-initiative and personal growth to enhance the organization flexibility and innovation. Thus, work and play notions do not represent incompatible activities, but they rather represent different ways of approaching activities or different frames for acting.

"Play" can be defined as a behavioral orientation (Kark, 2011), and it is distinguished from "work" by different purposes, processes, and spaces in which it takes place. Play has been particularly described as an imaginative, ethical and autotelic process (Statler., 2009). Indeed, while playing, people are involved in a threshold experience. Within organizational contexts, play activities may lead to imagine different forms of

organization, exploring alternative modes of sense-making and social interaction, and constructing new forms of possible identity for the organization itself (Kark, 2011). Consequently, an important characteristic of play process is represented by its boundaries in time and space. Play is, then, circumscribed within limits represented by its constitutive rules. It keeps existing and going on only as long as the self-imposed rules defining play mechanisms are respected. We then speak about ethical play because, as the rules become more complex, they distinguish between right and wrong actions.

It is important to better stress that while work is by definition a means to an end, that is producing value, play produces no concrete or monetary. Play can have no goal or outcome apart from carrying out play activity itself: it is a purposeless activity (Bekoff and Byers, 1981). Although imaginative and ethical are necessary play conditions, this autotelic character is the effective sine qua non condition to completely fulfill the definition of play and definitively distinguish play from other organizational behaviors (Statler, 2009). In order to clarify the organizational usefulness and benefits coming from a purposeless activity, it is necessary to emphasize that the ontology of play is not that of rational and deterministic natural laws, but rather that of uncertainty, complexity and chaos. It is precisely this ontology that allows the possible benefits of play to emerge at different levels, going beyond the frame of the activity itself (Statler, 2009). Play activities rehearse possible future scenario and alternative forms of organization, providing significant agility and possible benefits in facing organizational change. However, play is not a production machine: play processes generate variety not consistency (Kark 2011).

3 Play culture and learning

Piaget (1962) stated that in early childhood, play provides a rich context in which children interact with the environment and create their own knowledge about the world. That is, play is a stimulus-seeking activity that represents a fundamental cognitive processes leading to learning. As noted by Senge (1990: 314), whilst playing with dolls, children rehearse ways of interacting with people. When they play with blocks, they teach themselves basic principles of spatial geometry and mechanics. Later in life they will learn the general properties of the pendulum through swinging on a swing (...).Through experimentation (...) children discover principles and develop skills that are relevant in reality beyond play.

Indeed play is central to the practice of experiential learning, defined by Kolb (1984: 41) as a learning spiral process whereby knowledge is created through the combination of grasping and transforming experience. First, for learners have to set game rules and conduct standards on their own, there are called to take responsibility for their own learning. That is, play encourages learners to achieve authentic and higher order learning. Second, play pays attention not only to the outcome of learning, but on the learning process too. Indeed, implying utility and fun, it permits a fully and truly educational experience to take place. Third, play supports and gives birth to a complete experiential learning cycle by allowing players to look back to a familiar experience with a fresh new perspective. Thanks to play recursive nature, individuals can mature gradually and consciously. Thus, play can be a central form of deep learning, that can be nurtured within formal organizational contexts insofar as they allows participants to express themselves in authentic ways, self-organize, and create boundaries for recursive, timeless play (Kolb and Kolb, 2010). Therefore, the experiential learning triggered by play, as described by Kolb, is not a simple adaptive learning: it is a process that implies a double loop learning (Argyris e Schön, 1978), characterized by a deep and transformational reflection on one owns mental models, beliefs and *modus cogitandi*.

Therefore play processes within organizations can naturally and effortlessly engage people in open-ended processes of continuous learning. Actually, play can foster not just continuous learning activities, but can also trigger a “meta-learning” process, allowing people and organizations to learn how to learn, to introspectively analyze their own cognitive processes. It leads to wisdom, that Weick defined as an attitude taken by persons toward the beliefs, values, knowledge, information, abilities and skills that are held, a tendency to doubt that these are necessarily true or valid and to doubt that they are an exhaustive set of those things that could be known (Weick, 1993). Organizations have better to continually adapt, innovate and reinvent themselves, and consequently, individuals ought to be flexible enough to learn from mistakes, change their assumptions and beliefs, and refine their mental models. Play could be very useful to this attempt, contributing to the development of relevant skills, because it can provide a less risky situation, in which the potential for negative consequences is minimized and, then, people can learn by doing without fears or worries. This safety context enables exploration to discover hidden variables or opportunities, and practice to refine skills in complex and difficult parts of work, stimulating risk taking and learning from errors.

In addition, play offers the chance to gain experience and skills people need to learn, but also the chance to further develop and practice with them by ongoing rehearsal. Play is often seen as a way of practicing skills needed in the future, for example, through reversal pretending for challenges and ambiguities.(Kark 2011).

Within organizations, play activities can be fundamental in providing a supportive and relationally positive context and enhancing trust, dialogue and cooperation, necessary to facilitate knowledge sharing and knowledge creation. Indeed group or organizational play can reinforce or create a collective self and a communal identity, easing socialization process. Through play activities, individuals with different backgrounds and diverse characteristics join in and interact in a playful mode, bringing and sharing their peculiar set of knowledge and competencies. People that engage seriously with play in an organizational context, take part in a process to bring into question the overall significance of who they are as individuals or as a collective. Through this complex, nonlinear process of identity formation, the context and purpose of work itself may, in turn, change radically (Statler, 2009). This re-shaping activity can also affect external environment: through play process individuals and organization can make the world they've imagined and envisioned together, come real, giving birth and committing themselves to a creative learning process (Senge, 1990).

Another important distinction between work and play is the physical, temporal and psychological space in which they take place. As we already stated play is bounded in space and time. Within organizations, play often occurs in a narrow space and time when the dialectical tensions between *agon* (contest) and *paidia* (play), reaches a tenuous balance, with neither dimension overshadowing the other (Huizenga, 1950). Indeed, organizations seem to face the dilemma of balancing two different goals: high productivity and efficiency or creativity and learning. Nevertheless, these goals are complementary and need to coexist to create an environment where members can be creative and productive (Kolb, 2010).

Kolb and Kolb (2010) spoke about ludic learning space: an holistic concept that integrates learning play, describing a free and safe space that provides the opportunity for individuals to play with their potentials and ultimately commit themselves to learn, develop, and grow. These play spaces represents "protected milieux", that have boundaries to partially keep out the world, that reduces disturbing affect and facilitates sense making (Kark, 2011).

Individuals need to step sideward into another reality in order to rediscover play, free from economic pressure and organizational responsibilities. This frame represents a differentiated level of reality, where people ‘play’ with the elements of the familiar and defamiliarize them. Modell (1996: 27) noted that the concept of play is linked to the illusion one: even the etymology of the word illusion, can be traced to the Latin word *inlusio*, *illudere*, which means literally “in play”. Such “illusion” can be sustainable only if it is kept within a frame which seeks to separate it from ordinary life. Rules are particularly important in achieving that. The temporary world of play is a self-organizing system where participants set the rules on their own, defining the play space. In this view, the ludic is an autopoietic system that continuously generates its own existence and shape its own identity. The players join the game by choice, imposing on themselves rules and constraints they vowed to observe in order to continue to play. Therefore, on one hand, the fundamental essence of play is the freedom to create and be set apart from ordinary life. Yet, on the other hand, for this to be accomplished, constraint is required in the form of rules and other factors related to space and time (Carr, 2003)

Nevertheless, these spaces are presumed to be not just play spaces: a fortiori, they can represent knowledge spaces, in which knowledge creation can be located. Eventually, they could be called *Ba*: shared spaces for emerging relationships in which knowledge can be shared and created (Nonaka and Konno, 1998).

Playing spaces could be related to both Originating and Interacting *Ba* concepts. Indeed, the former is the context for socialization. Through sharing common experiences and physical proximity, individuals are enabled to share their own tacit knowledge, ranging from technical expertise and know how, to assumptions and personal beliefs. In this space, sympathizing and empathizing processes let subjects remove barriers between the self and others, in a climate of care and trust. The latter, is defined as a more consciously constructed context, where tacit knowledge is turned into explicit. Externalization process requires the expression and the translation of tacit knowledge. Thus, it involves dialogue and figurative language or visual techniques as key-factors to support the articulation. It lets express tacit knowledge, creating a self-transcendent mental world and, then, a shared amount of integrated knowledge, made up with common terms and concepts.

The playing space is presumed to be a support that can represent a trigger for the creation of knowledge. Starting from playing activities among individuals, a spiral of

knowledge (Nonaka and Takeuchi, 1995) can be activated and reach wider epistemological levels, reaching the whole organization.

4 Research Methods

The article research design is based on in-depth qualitative study (Charmaz, 2003). Therefore, to investigate the research problem, the paper adopts an inductive method, rooting the research within a tradition of studies that give credibility to the research findings of an inductive approach (Gioia et al, 2012; Corley et al. 2011; Tracy, 2010; Creswell, 2000). As noted by Gioia et al. (2012) one of the merits of inductive research is its undeniable capacity to extend the existing theoretical knowledge over what is already known. Thus, to produce data, the paper adopts an approach consisting of three main sources of data: 1. Interviews with organization managers that have implemented the *Play Factory* and *2Km of future* projects; 2. Participant observations, where the researcher becomes part of the everyday working life; 3. Archive documents (annual reports, etc.) from the company.

As what concerns the interviews, the paper was heavily influenced by the approach delineated by Roulston (2010). Indeed, the quality of interviewing and the possibility to generate ‘credible’ data are crucial aspects to consider when this method is adopted. The analysis is based on interviews that the researcher (s) had with several managers at Loccioni group. In particular, interviews were undertaken with key informants, such as:

- Loccioni Group Founder and General Manager; Business Units Top Managers and research areas Top Managers, to verify the homogeneity and comprehensiveness of play approach within Loccioni Group;
- Loccioni family second generation, to verify play approach sustainability;
- Communication Manager and one of the external design consultants that have been involved in the concrete realization of “Playfactory” and “2 Km of future” projects.

Key Informants	
Enrico Loccioni	Entrepreneur and Loccioni Group Founder
Renzo Libenzi	General Mnager
Maria Cristina Loccioni	Process Analyst and Procurement
Claudio Loccioni	Humancare Business Unit Manager
Damiano Loppi	Energy Business Unit Manager
Marco Pacenti	Industry Business Unit Manager
Tommaso Puerini	International Seats Manager
Cristina Cristalli	Research and Innovation Manager
Gino Romiti	Research and Development Manager
Maria Paola Palermi	Communication Manager
Lorenzo De Bartolomeis	Isao Hosoe Design

The interviews covered the following points:

A) Play and work: this section has aimed at understanding the relationship between play and work. In particular we wanted to understand if play and work activities are spatially, temporarily and psychologically distinct.

B) Reasons and achievements of play culture implementation: this section has aimed at inquiring causes and effects of play approach formalization within Loccioni Gorup. Particularly we wanted to inquire if play activities are really purposeless within organizations as well.

C) Play and learning: this group of questions were asked to learn about the relationship between play and learn. In particular, we wanted to know if play activities can enact experiential and rehearsal learning.

D) Play and Ba: these questions were to know more about the relationship between play and knowledge creation space. Specifically, we were inquiring the existence of a link between space designing and play activities, on one hand; between space designing and knowledge sharing and creation, on the other.

E) Game and play: this section was aimed at making play concept more explicit. In detail, we wanted to know which kind of play Managers referred to.

Interviews typically lasted between 20 and 40 minutes and were tape-recorded. Besides, the researcher (s) took part in the everyday working life of the organizational members. Participant observation lasted for about 4 months. The researcher (s) participated in the company's working life and she was able to observe in detail learning

processes within the Play Factory. In fact, this method allows investigating a contemporary phenomenon within its real-life context. Indeed, as observed by Hammersley (2007), the benefit of this type of inquiry is that it permits a detailed understanding of the phenomenon through a richer data collection. At the same time, documentary evidences were produced, by collecting archive documents (websites, annual reports and internal house organ). We looked through archival documents in order to track the history and the present-day activities of the organization.

4.1 The research setting

The setting for our data production occurred over the months of October-February 2014 at Loccioni Group. Loccioni Group is a medium-sized Italian company based in Ancona (Italy) and specialised in technological solutions addressed to diverse clients in the field of automotive, home appliance, environment, and health care. In particular, the company provides energy and environmental solutions, quality control for industrial processes and health care, assembly, testing and quality control systems for automotive components.

The intensive technological sectors in which Loccioni Group operates oblige it to consistently invest on innovation processes to keep up the technological entry barrier, to preserve its competitive advantage and its leadership position in heterogeneous niche markets. Consequently, learning and knowledge creation processes are fundamental in Loccioni Group everyday activities and they deeply affect company production and economical results.

Nowadays Loccioni Group operates in five different business areas (Mobility, Environment, Home, Humancare and Energy), has four headquarters (Italy, Germany, USA and China) and has its solutions installed in more than 40 countries worldwide. What makes it a more interesting and consistent case of study are also its economical performances over the years: trends are clearly positive, showing a continuous and solid growth. Below, some key figures are highlighted.

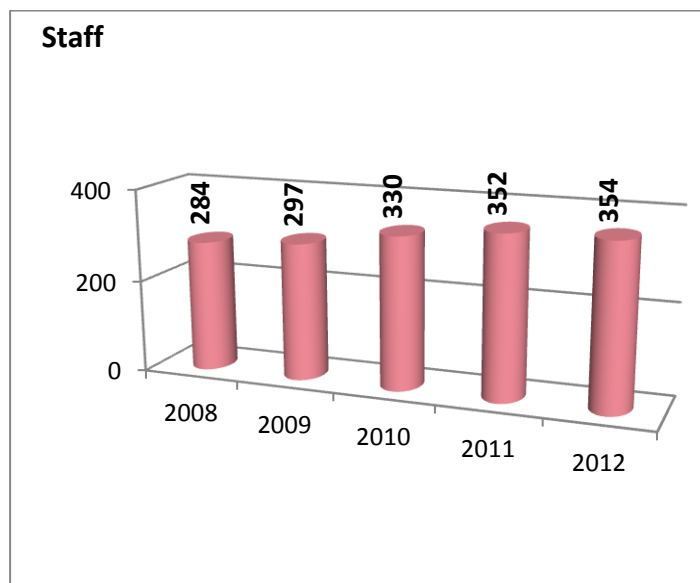
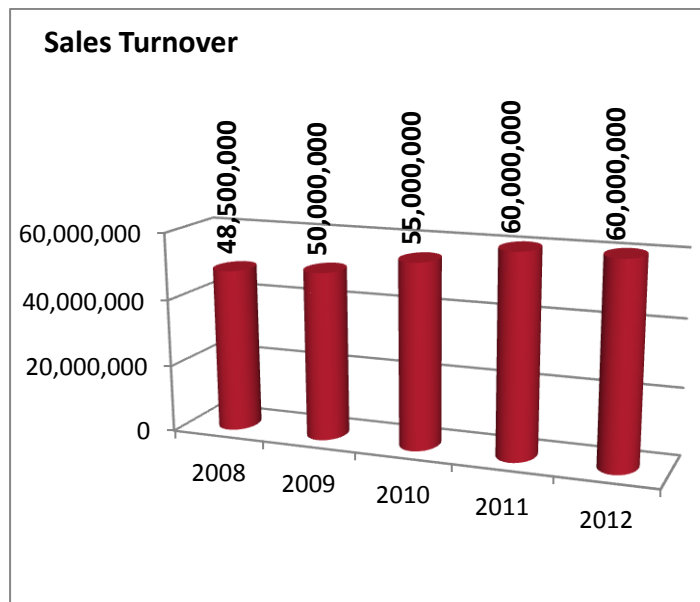


Figure 1: Sales Turnover and Staff trends.

Nevertheless, the main reason why the company was selected is because it has been considered as a unique case within the Italian context to introduce ‘play’ politics and for implementing them.

The paper focuses on a project named “Play Factory”, developed since 2008 by an Italian small firm (Loccioni Group). Loccioni Group initiated a project of ‘Play Factory’ in 2008, with the purpose to ‘encourage and spreads a new culture of work and “creative doing”’ (Social Balance, 2012). The project “Play Factory” has aimed to promote a playful culture, stimulating collective and generative learning loops.

Moreover Loccioni Group was ranked third in the Italian Best Places to Work in 2014, distinguished itself for camaraderie, respect, pride, credibility and fairness: all values that show a strong sense of belonging and a deeply rooted team spirit and, for instance, create an ultimate atmosphere and climate to develop an organizational play approach.

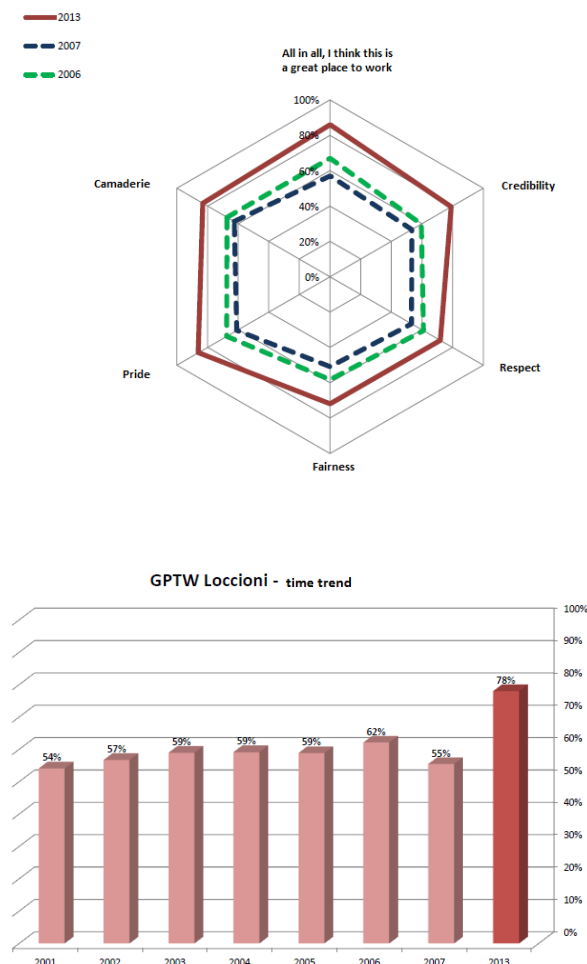


Figure 2: Loccioni Group elaboration of GPTW data survey over time.

‘Play Factory’ was born from the collaboration between the company and a Japanese engineer and designer, Isao Hosoe, specialized in studying workplaces and their impact on people. Indeed, along with Play Factory, Loccioni is developing a wider knowledge company model focused on the learning aspect strongly characterizing its culture. “2 Kilometres of future” is another project aiming to contextualize Loccioni Group in a sort of macro-BA space, thanks also to Thomas Herzog’s urban planning.

In this sense, Loccioni’s focus on enlighten human resources policy, such as the opportunity to stimulate creativity and individual growth, become extremely interesting for our analysis. The next section will be devoted to the present of the findings coming from the interviews.

3 Findings

Play culture

As emerged from the analysis of data, Play is interpreted as an approach to the work through which it is possible support socialization process and learning processes. Enrico Loccioni defines Play Factory as follows:

“on one hand, Factory is an environment that is not the traditional manufacturing place: it is wider and its definition includes also all the collaborators. On the other, play is the most important part of the work, because thanks to play people can meet and speak with each other”.

Indeed the Factory is the organizational concrete recipient that has to follow market logics and give birth to economical production activities. Play Factory is the combination of these two co-existing concepts: it is the organization where it is possible to apply play approach in order to pursue economical goals. Loccioni Group and Enrico Loccioni himself have developed the awareness that play culture approach is rooted in children behavior and that it is aimed at adopting free thoughts typical of childhood. Consequently, being a play organization is a cultural and attitudinal matter: *“the organization itself is not a game, but people’s attitude in facing problems, dealing with clients or life should be play”* claims R&D Manager, Gino Romiti. That means that play culture supports attitudes that consider problems as growth chances and opportunities, and as ways to get self-gratification and sometimes fun.

As observed during the fieldwork, a specific organizational culture is envisioned by the top manager. For example, General Manager Renzo Libenzi one afternoon was coming back at work with a big smile after lunch. As soon as he entered the office that he shares with other top managers, he claimed to be very excited and satisfied of his day. He added that he and another Loccioni BU manager went out for lunch because they were having lot of problems with an order of a client. He surprisingly stated that they had to celebrate this situation of trouble: as successes, problems need to be ritualized as well and, moreover need to be faced with cheerful mind and approach to avoid to stuck in unproductive behavior and complains. He added that they go out for lunch and they even got a big ice-cream cup to celebrate their problems.

Play Factory is then considered by Loccioni managers as a place where it is possible to create innovation through creative processes triggered by play activities and playful ultimate atmosphere and context. Innovation is interpreted not just as a final result, but as a pervasive modus agendi. "Our Play factory is a place where creativity and innovation moments are stimulated by play approach and where these ideas turns into a concrete and tangible reality of the industrial dimension", reports R&I Manager, Cristina Cristalli. Adopting an organizational Play culture requires interpreting the organization as an everlasting start up, where there is both the innovative recipient and young entrepreneurs that become knowledge workers. Knowledge workers are particular organization figures with no timetables or physical boundaries, but they are always productive (active). Indeed, their work does not end up with a mere task execution, but it goes further developing a thoughts. As in the words of the Humancare BU Manager, Claudio Loccioni.

"Play culture is, for example, me that right now, at 10.30 pm, I'm heading to Bologna airport for a business trip. It would be stressful and tiring, if I hadn't travelled with a colleague with which I have fun" claims"

For almost all the interviewed managers, being a corporate culture rooted in play means trying to also have fun while working, while putting forward the corporate mission. In this vein, motivation is crucial:

"Play is doing things you like doing."We do a job requiring us to be available almost 24 hours per day: if there is a pleasure in doing so, it becomes possible to even have fun while working" (Communication Manager, Maria Paola Palmeri)

More specifically, Play Factory is considered as an environment where life and work goals are interconnected (for someone they are even exactly the same), because there's a tight symbiosis between the two spheres. According to almost all managers, Loccioni play culture lives outside workplace and time as well. Indeed, they pick out the person not the profession, because play is not just an approach to face work, but to face the whole life. In fact they believe that there are no boundaries between personal life and work, but there is a continuum.

There are several examples of pervasive play culture from different business units and functions of Loccioni Group, showing how play culture crosses work place and time boundaries.

In the past Humancare BU was a young start up, made up by young people with a local market and team used to go out very often after work, and many appointments were become fixed every week. Now it has become more difficult to organize because team members are always around the word.

As regards Energy BU, the guys of the team have created a Whatsapp community to constantly exchange cheerful moments of their own lives not strictly linked to work. Or again, every Friday going to a local village (Genga) at lunch to eat the local bread (crescia) it has become a regular thing for Research for Innovation team. There is even a photo of them hung on the stand wall.

Obviously this kind of relations have fruitful implications on team building and team spirit rooting. It also emerges that managing a play organization means not only supporting collaborators' creativity preventing them from getting annoyed during their work daily routines, but at the same time it means being able to set goals. Managing a Play Factory is challenging because it is a very unconventional way of managing and relating with people. Nevertheless it is also difficult because, as stated by Industry BU Manager, Marco Pacenti:

"goals have to be achieved anyway and it is important to make it clear that while playing, people focus has to remain on the results and on being on time".

Being a Play Factory means doing all the activities in a dynamic and fluid manner, without rigid structures or hierarchies. *"This way of working could appear as a play if observed from the outside, but it is not just that"* adds Industry BU Manager. A play organization is somehow opposite to pyramidal hierarchic structure that prevents from speaking and exchanging information freely with anyone within the organization. But it

doesn't imply the absence of responsibility or specified roles. Someone even think that, by definition, play factory can be managed, but can be just guided towards a goal by anyone within the company, there's not a hierarchy to be observed. Moreover at the base of this culture, trusting people is essential. Moreover Loccioni is a company that adopts team working as constant *modus operandi*, so its collaborators need to be very tight-knit. *"Trust is something to conquer bit by bit, it takes time to be built up and, consequently, it's expensive"* (International Seats Manager)

It's not hierarchical but is related to the coherence between one's words and actions. Consequently if some serious errors occur and undermine shared values and principles, managers strongly believe that they can break up trust relationship and, then, it would be difficult keeping working on team. Having fun doesn't imply being careless about rules or not following a strict ethics; on the contrary, *"at the base of our play culture there is a strong and well defined organizational and personal ethics, and play helps us putting it into practice"* (Energy BU Manager)

While the researcher was interviewing GM Renzo Libenzi, we were interrupted and a new intern was introduced to us. He said to him *"Enjoy yourself immediately and please do not hesitate to bother anyone within the Group to obtain information you need!"*

Loccioni Group main Results and Achievements through Play Factory formalization

Loccioni Group along with the "play designer" Isao Hosoe gave birth to this series of projects ranging from renewable energies to medical devices field, from ideas generation (with *Play 40*) to corporate values communication (*Pro-gettare* behavioral installation), from proxemics concept application to work emplacement to software design of new interfaces. Design through play has been transformed into a tangible element pervasive in all corporate divisions and processes.¹

However all the interviewed managers agree in saying that the formalization of Play Factory has been useful to qualify a pre-existing model, stressing work convictions and behaviors that didn't need to change to fit in the model proposed by Hosoe. That means that the definition is an ex-post definition: "the reality of our valley and our territory was already strong in hosting our customers, we already took care of them with Shatzu massages for example; play activities for our guys were already implemented and Professor Butera had already developed with us revolutionary Leaf House

¹ 15th December 2011 post on Play Factory Blog

project”recounts Communication Manager. Play approach is considered to be innate within Loccioni Group, so since formalization things haven’t change a lot. It has been mainly a matter of communication tools that have helped the Group to describe itself and become fully aware of its own identity. It has pointed out some peculiar attitudes that Loccioni people unconsciously have or that were taken for granted.

Working at Loccioni Group for one of our engineer is play itself, because they are involved in continuous innovation paths during which, for definition, boredom doesn’t exist and moreover, the Group has chosen to work with young people entering the world of work, with extremely high enthusiasm. The impact of this formalization was particularly strong on the external relationships with Loccioni Group customers because “it’s not common seeing people enjoying themselves and smiling while working, showing workplace as a place where it is possible to do more than work” claims Energy Bu Manager, Damiano Loppi. Actually the focus of Loccioni activities to gain customers’ attention and loyalty remains on distinctive highly technical competences in solving complex problems. Play approach is an intimate part of the higher and more abstract part of Loccioni approach, that is distinct from the “Factory” one, that is more operative and pragmatic: *“the challenge of our Play Factory is to merge these two complementary distinctive aspects and make them coherent with each other, letting people work hard with play spirit”* (R&D Manager, Gino Romiti)

Play factory formalization has resulted in important achievements for Loccioni Group, from both external and internal point of view. Indeed play approach has been not just an external communication approach, but it has significantly affect on organizational culture, bringing the focus of work activities on clients and collaborators. “Play culture importance is all about surprising others, both colleagues and customers” affirms General Manager.

Moreover Play culture formalization have had also internal effects, making organizational vision more vivid to be reached and bringing collaborators at the hearth of technical challenges: *“Play factory formalization has represented the starting point of our knowledge company model”* recounts Communication Manager.

Play and learn

Learning processes are crucial to Loccioni activity and to its success: all managers are really aware that risk is ubiquitous and unavoidable in their work and markets, dealing

with cutting edge technologies and innovation boundary. In this sense, in Loccioni culture, *“playing is not being more risky, but turns out to be simply a kind of approach to risk”* (Industry BU Manager)

Adopting play approach prevents people from over thinking about risk because playing requires the irrational and spontaneous approach of children affirms Enrico Loccioni, perfectly matching with the aforementioned theoretical play concepts. In this reality, it is obvious that accepting errors is important according to every interviewed manager. *“Errors represent our everyday normality because we have chosen to invest on young guys without working experiences and moreover, because we realize prototype. Consequently we have decided to balanced errors with ad hoc projects, such as Silverzone that places side by side one of our young collaborators and a major retired person with lots of experience and successes, to ease learning processes and preventing errors”* (Cristina Loccioni, Process Analyst and Procurement)

In effect young people that entered the Group are suddenly called to action: they have to cope with major customers or contact potential clients, they take part to important events or meeting representing the company. They are requested to be proactive and be purposeful and have their luggage always ready to leave.

Anyway, it emerges from managers' answers that Loccioni risk concept is not extreme: it is always balanced by a strong confidence in their own capabilities and competencies in doing their job. So play doesn't mean being more inclined to risk, but rather being more motivated in achieving the goals that have been set and doing better the things that they want to do because of the pleasure and fun they get in doing so. Indeed playing in team, makes people be more enthusiastically involved in achieving goals, putting less attention on risk. In addition *“being with others is more pleasant and it helps us with risk analysis: playing with others doesn't mean acting irresponsibly”* (Cristina Loccioni, Process Analyst and Procurement)

International Seats Manager, Tommaso Puerini, explains this concept with an effective play metaphor:

“It's like a football match that is the results of equilibrium among strategy, our own capabilities, adversary and place evaluations. But if there is perfect equilibrium, the two teams will always tie the match. Then, if you want to make the difference, you need to plash out every now and then. But this is a calculated and prevented risk”.

For example, when they have recently decided to enter the food and beverage market, it was a completely new challenge. They decided to face it not moving big resources and energies to this sector: they started introducing just a new person, co-financing a doctoral research student, to gather information to elaborate a coherent strategy and elaborate a preventive risk analysis. Play let the Group researchers continually deal with innovative challenges and projects. Obviously, afterwards, rational thoughts are necessary as well. This is particularly true in Research for Innovation, coordinating long term research activities, as reported by its Manager: *“we always repeat our mantra -if you do nothing, you break nothing- to remind ourselves that if we didn’t take risks we would end up following the beaten path”*.

Play culture means stimulating a positive culture that is not aimed at punishing errors, but rather at rewarding positive attitudes, supporting risk taking and action taking. Indeed, according to all manager sample, the error represents a way to learn, so it doesn’t have to be punished: it should be underlined to prevent other people from repeating it. For Enrico Loccioni mistakes represents a damage only if they’re hidden or denied. They agree that it’s normal being wrong one or two times, but it’s important to question yourself why you are keeping mistaking, giving a huge relevance to double loop learning implementation. When errors occur, they are focused on analyzing and understanding the causes not to further repeat them. R&I Manager, Cristina Cristalli adds: *“In this culture, errors are welcomed: they are one of the unavoidable aspects of playing activities, but obviously we are not speaking about errors caused by ignorance or carelessness”*.

For example, some years ago Research for Innovation team bought a very expensive robot: they were working on it, but they couldn’t connect the cables in the right way. They tried, but they didn’t succeed and the robot miserably got burnt. That represented a huge cost for the company, but it represented a fundamental step to learn something as well. *“During the history of Loccioni Group there were lots of projects like this that didn’t have positive results and represented mere costs, but being play means being able to take the positive side from all the situations to always learn something”* recounts Cristina Cristalli.

When something gets wrong, they all declared not to look for someone to blame, but they aim at valorizing the error. *“The biggest is the error, the highest are the chances to have chosen the wrong approach and direction to face the whole order. Consequently it’s*

not one individual's fault, but the blame is to be put on the whole team" (Energy BU Manager)

Play and space

According to Enrico Loccioni "Work spaces are educational spaces. Every space needs to be projected according to the activity it is destined to: spaces represent not just work quality, but also life quality. For this reason, it is important never giving up to improve spaces: *we have still lots to do, but we are working on it.*" In this sense, spaces become crucial for people to work harmoniously and efficiently together and, for instance, to get more significant results. It is easy to team up in suitable spaces.

Nevertheless, there are many managers that don't see the evidence of this relationships within Loccioni company and culture: they stress first of all that in order to have a play culture, play people are needed, otherwise having fun and feeling comfortable is not possible, even in a nice space. Play culture lies more on people attitudes and behavior rather than on space design: Claudio Loccioni states "*good ideas can occur also in terrible spaces, history is full of important people that had genial ideas while in jail*".

Play Factory started with a design projects that is quite strange for a machine seller: it is the result of Isao Hosoe's external stimulus that has made Loccioni Group reflect upon the corporate identity itself. Lorenzo de Bartolomeis, Isao Hosoe collaborator, stated that the aim of this design project is to design a new concept of workplaces. Indeed nowadays there is a tendency to design offices that look a little bit like children's playground or playroom. The fundamental motivation is to delete the formality concept at work to enhance a new and deeper openness among people to sustain ideas exchange and dialogue. We have chosen to mainly focus our attention on play tools (Play Forty, Progettare, Behavioral Energy and Energetic Meridian) to enable people's interaction and reasoning through play.

As regards internal spaces, managers stated that spaces in order to implement play culture, should be livable, luminous, tidy to enhance people collaborating and being more positive. They should be open and flexible, according to the idea of a common place for team dialogue and confrontation. Loccioni space design is actually sober in order to maintain and preserve order and accuracy, that are reflected in the attention that ever collaborators should reserve to punctuality and cleanness of spaces, desks and emplacement. Claudio Loccioni notes "*In this sense, we are quite different to Google play*

and space culture: I think that in realities like Google the focus is too much on design and furniture, diverting the attention from people and their smiles”.

Open space concept does support sharing and contamination of cross projects: within Loccioni Groups there are almost not personal offices and there are a lot of meeting rooms. Loccioni employees often move easily from one room to another, switch their emplacements according to their needing and activities and are often busy with meetings with their colleagues. *“It’s the same concept of a locker room shared by the sportive team where there are not singular chairs, but benches”* affirms one of them. In this regard, several managers, instead, wish there were larger and homogeneous spaces. For example they suggest there should be a creative space ad hoc to ease interaction. This place should be distinct from production spaces or spaces dedicated to other activities, but it should not be a private space and visible to everyone. They suddenly declare that’s a work in fieri: *“we are always experimenting new solutions”*. For example only some years ago Humancare team was set in the middle of production spaces and it was difficult to build a real team spirit, but now they have a dedicated space and things have got sensibly better.

On the contrary, each manager that was interviewed agreed with the existence of a tight relationship between knowledge sharing and place designing. For instance every Loccioni laboratory has been projected to have production at the center of its map, to let the activities be visible from any point of view.

Workplace should ease communication among people: open spaces, despite their negative aspects, such as noises and commotion that are frequently present within Loccioni offices, make it possible to maintain direct contact with activities and people and to stimulate ideas through everyday observation. Open space ease information and ideas sharing and spreading.

In Loccioni Headquarters, there are ad hoc areas dedicated to physical play, like ping pong or billiard table. Then there are also some spaces devoted to play as real fun where visitors, ranking from MBA students to children of elementary schools, can learn something while playing. In the new building they, *“want to integrate the reception hall with Pro-gettare behavioral installation to show to each of our hosts the importance of merging professional and private sphere since the beginning of the company tour”* states General Manager. In fact, as noted by several interviewed managers, if work activities are interpreted as play, all the spaces of Loccioni Group can be considered as play spaces, also interpreted as non physical spaces built from people relationships. It is a working

kind of play that has to be contextualized in a company environment, nevertheless it implies taking oneself less seriously.

For example, Claudio Loccioni tells *“when I worked in Germany with some Italian colleagues we brought a coffee machine into the office. German colleagues seemed to be quite disoriented, but after a few time it has become an excuse to arrive earlier at office and have breakfast all together with brioche and cappuccino”*.

Clearly, observing a large organization reality, it could be noted that play approach is not equally perceived and equally pervasive at all levels and in all the organizational units: it certainly depends upon individual personality and inclinations, but it's also a matter of one own' role or activity. There are some organizational functions, such as administration ones, that are far away play approach and in which this particular modus operandi can't be applied, because a certain rigor is required and hence rehearsal profitable learning through play wouldn't be applicable or favorable. Being a play organization is also offering a more pleasant environment along with more friendly people to welcome visiting people: for example, it implies taking the incoming clients out for dinner or schedule their week-end, to make them discover the surrounding territory and its typical dishes.

Consequently, this design project is concerning both internal and external places, going out company boundaries to *“avoid being a non-integrated oasis in the middle of the desert”*, as suggested by R&D Manager. General manager affirms *“Our vision is to become famous not just as a single company with ad hoc rooms or spaces to implement play culture, but as an entire integrated heritage area (the Vallesina valley). We are currently working on it”*. In effect, they started a public-private co-operation to restore two Kilometers of river Esino flowing next to their headquarters and they are thinking about building areas to let people always gather together autonomously and respectfully.

Hence play factory formalization has been particularly useful for the internal and external dynamics linked to people relationships, rather than for becoming a communication slogan for enhance Loccioni Group external perception.

Play and Game

“When I think about play within Loccioni Group I think about a game to invent every day, actually a real play supply-chain, starting from designing and arriving at result achievement and satisfaction” states Enrico Loccioni. Indeed Loccioni Group perceived

itself as a real team and, hence, it needs to have supporters, that are collaborators themselves but also clients, that should be ambassadors of the company and wear “Loccioni Group shirt” showing team fondness, affirmed General Manager. The team, then, needs to win and convince in the market fields. The game that is often used for representing Loccioni Group is Isao Hosoe’ Play 40 cards because they represent corporate values and culture, letting groups of people playing with ideas and imagines.

In this context, this choice appears particularly important, because the description of this game seems to be particularly suitable and coherent with the concept of play that has emerged from the literature theories previously analyzed

“With Play40 it is possible to invent different ways to play, since the aim is not what but how we play. (...) The aesthetical education develops through the game since it is not subordinated to a rational goal nor the intellectual moment is sacrificed to the sensible impulse: the only goal of this activity is itself.”¹

Then the metaphor of sport team is frequently used, even if sport team are normally more structured than Loccioni team. Basket was chosen to represent the Group some years ago, when the contribution of the individual, especially in certain role, was more significant and used to make a great difference. Football was chosen for representing the shift towards a team spirit focus, but also for requiring creativity and fantasy rather than relying on physical strength. Some others managers wanted to further stress the importance of the team work and then chose sports like curling (where there is one person proposing an idea, but there are other team members that are fundamental as well to push it further) or motorsport (where there is a mix of fundamental components: the team, the machine technology and the driving leader).

This team sport orientation is particularly evident earring Loccioni collaborators chatting: it’s not infrequent earring them scheduling some football, tennis, beach volley matches with the colleagues, or planning trip during the week-ends to go to watch rugby or basket matches. During hiring interview, young guys are often explicitly asked about the sports or hobbies they practice, interpreted as team working discriminant factors. Indeed lots of Loccioni Group members have not only significant experience in playing team sports, but also in training teams.

Particularly interesting is the metaphor proposed by GM Renzo Libenzi *“the Group is a kind of breeding ground for young talents, so it would take part at youth*

¹ 20th November 2008 post on Play Factory blog <http://www.play-factory.it/>

championship". Anyway everyone agreed in saying that Loccioni Group would be a team playing to win its championships: the majority of them stated without any doubts that the Group would play in the highest world championships. *"We want to play with the best teams in the world and be the best team in the world"* affirmed Enrico Loccioni referring to their declared vision statement that is *"Loccioni: the Open Company. The choice of the best in the world"*.

As regards external competition, it is an important factor, because the goal to win the concurrency and to conquer the leadership position is deeply and widely shared, but it is mitigated by the open company culture that aimed at building partnership relations when possible, and because of the technological differentiation strategy that sets the Group in a market niche with high technological barriers. Enrico Loccioni says *"Play approach starts to fall apart when it starts requiring a sacrifice, I mean when competition appears and play is no longer spontaneous, but it becomes a commitment to prevail."*

Actually from our survey rises a significant role of competitiveness in Loccioni Group. Indeed it is commonly believed that good and transparent competitiveness is healthy, but it should be first of all a competition with one own self and then a chance of confrontation with others, aiming at continuous personal improvement rather than at battling and being in conflict with others. More interestingly, some managers perceive a strong push coming from internal competition: *"the positive and healthy competitiveness existing among the different business units in which the group is organized, the engine that sustains Loccioni Group growth"* significantly sustains Industry BU Manager, Marco Pacenti.

In this vein, we believe that this competitive orientation should be seriously taken into account as a major interesting aspects because as stated by one of the interviewed manager *"Actually there is a very strong competitiveness: play is a tough challenge for the victory. I think that, in this respect, it could be more appropriate speaking about game rather than play"*.

7 Concluding discussion

Through this case study, we have aimed at inquiring the relationship between play and learning. We have started from the theoretical analysis, considering multidisciplinary contributions to finally arrive at organizational context enriching the study framework with a concrete example. Play has been introduced as a behavioral orientation (Kark,

2011) that can be applied also within organizational contexts. Anyway, playing activities have to be circumscribed within specified boundaries in time and space and moreover they are defined as autotelic activities, as to say, they can not have a preset goal or purpose to achieve (Statler, 2009).

As emerged from our analysis, play can be considered as an approach linked to personal attitudes and behavior, but it also clearly appears how boundary-less is play approach: on the contrary, all the interviewed Loccioni Managers, wish for play to be an approach affecting not just work, but more generally the whole life.

In this vein, our case study goes further in applying play within organizational context and exploiting its beneficial characteristics: play approach at Loccioni Group has not stopped at individual behavior applications in developing individuals' cognitive and emotional capacities necessary for effective, productive work. But it deeply influenced the organizational culture, becoming a *modus operandi* to face the heterogeneous and complex technological markets they constantly have to deal with. Play is not a purposeless activity on its own, or at least it's not just that.

However, we think that it's not reasonable speaking about play culture *latu sensu*, but rather we prefer speaking about a play aspect that stands out from organizational culture. In fact, although play approach is a distinctive Loccioni characteristic from an external point of view, it is not as homogeneous and widely shared as its core values from the internal perspective. Indeed, as stated in findings paragraph, play approach depends on personal inclination and functional requirements as well; and moreover the essence of play lies in players' freedom to join the game by choice, accepting and observing roles in order to continue to play (Carr, 2003).

Certainly, it could be misleading and over-simplificating to consider Loccioni Group success as a result of play approach that could be translated in other realities. The sectors and markets Loccioni Group operates in, are highly complex and continuously challenging: the competencies are needed to meet customers exigencies and needs are mostly grounded in pure rationality, meticulous precision and careful planning. Then, it could happen that sometimes play approach that is instinctive and creative, comes into conflict with organizational exigencies and production logics, as stated also by Kolb (2010). "The challenge of our Play Factory is to merge these two complementary distinctive aspects and make them coherent with each other, letting people work hard with

play spirit” stated R&D Manager, Gino Romiti: it’s clear that it is not easy neither obvious to achieve.

Indeed, play principles within organizational culture aren’t to be blindly and exclusively followed, but they need to be mitigated by and matched with other principles of management. Play aspects should represent a support and a stimulation for an organization to turn into a performing and successful one, inviting organizational members, if possible, to work and participate in a playing way to organizational activities.

Consequently, we believe that from an organizational point of view it is relevant to merge the concept of game with the play one. Thus, as already noted during our case study analysis, competitiveness is a fundamental factor for an organization: it pushes organizational members and organization itself to continuously learn to improve and adapt to external changes. Moreover, a more structured approach better reflects organizational realities, making it possible to properly match play approach with economical world and rationality, without losing play flexibility. Play and game often interact in a synergic relationship determining a sort of “plame” approach to organizational reality.

Loccioni Group and organizations, in general, need not to stop reinventing themselves and innovating their activities to maintain their technological competitive advantage; they have better to be flexible and reshape themselves activating creative learning processes.

As affirmed by all Loccioni Managers, play has to be intended as a way of facing uncertain and new situations, balancing risk with an objective evaluation of their capabilities and competencies in doing their job. Then, play represents a way to practice experiential learning (Kolb, 1984), gradually and consciously learning by doing from mistakes and errors, thinking about causes and reasons of the mistakes, not punishing them. This peculiar flexibility of play activities enhances people and organization adaptation and evolution capability, triggering imagination and problem solving capabilities (Statler, 2009).

Play organization is then considered by Loccioni managers as a place where it is possible to create innovation through creative processes triggered by play activities and playful ultimate atmosphere and context. Consequently, play activities in Loccioni Group, if intended *latu sensu*, can really be the start for learning processes, or, as stated by Nonaka and Takeuchi (1995) can be the start for a spiral of knowledge creation, that from individuals can reach team and organizational ontological levels, letting individual or

team experiential learning be profitable for other business units or the whole organization as well. In other words, Loccioni spaces can be intended as BA, knowledge creation spaces, with a particular focus that has emerged on socialization and proximity dimensions: space projecting and designing are aimed at easing dialoguing and sharing of ideas, not at building up ad hoc playing spaces. Accordingly, play approach is focused on play people rather than spaces: first of all trustfully and caring relationships and a sense of camaraderie are needed to build a sense of belonging and commitment. Obviously this is made easier by suitable spaces existence: at Loccioni Group spaces are open to get rid of formality and hierarchy and to ease ideas and knowledge exchanges, but they are also sober to maintain and preserve order and accuracy, to reflect the attention that ever collaborators should reserves to punctuality and precision. Actually, space conception itself represents the co-existence of a “play” and a “game” side; the existence of a creative and playful aspect of Loccioni culture within the essential organizational nature of its purposes. Finally, this particular combination is the foundation of this organizational model sustainability.

Appendix

Research tool: semi-structured questionnaire

Section A- Play and work

- A1) According to you, what does it mean being a play organization (or Play Factory, as you have defined it)?
- A2) What does it mean working and managing a play organization?
- A3) How intensely and extensively do play culture and philosophy live outside working time and place?

Section B- Reasons and achievements of play culture implementation

- B1) Which changes or effects have been caused by the formalization of your play approach (through Play Factory definition)?
- B2) Which are the main reasons that lead you to undertake such a peculiar path?
- B3) Did you expect the results you have achieved? In particular, which did you expect and which not?

Section C- Play and learning

- C1) According to you, what is the relation between game and risk? Does playing mean being less rational and more risk-lover?
- C2) How important trust and error tolerance are within Loccioni Group?
- C3) What happens when someone makes a serious mistake while playing?

Section D- Play and Ba

- D1) Which is the role of designing and planning physical spaces, in play approach implementation?
- D2) How these designing activities affect ideas and competences sharing?
- D3) Are there ad hoc spaces for playing activities at Loccioni Group?

Section E- Game and play

- E1) Which kind of play you mostly refer to?
- E2) Do you remember some interesting playing activities of your childhood that affect your personal growth and your managerial style?
- E3) According to your opinion, which is the relationship between Loccioni Group and a sport team playing in a league? In which championship Loccioni Group would play?

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