The role of institutions in the evolution of service ecosystems

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Abstract:

Purpose – According to S-D Logic, institutions aregovernance mechanisms for service for service exchange and value co-creation in service ecosystem. Empirical evidences aimed at observing how institutions emerge and affect resources integration and value co-creation in service ecosystems are scarce.

Methodology/approach – In this paper we studied the Lego Group service ecosystem, with a particular attention to some loci for value co-creation:the company, two relevant communities(Afols and Gamers) andthe distributors' network.

Findings – Results - In our study we provide empirical evidences that institutions, emerging from the consolidating of practices, have a critical role in determining the evolution of the service ecosystem. Institutions allow actors to coordinate, integrate resources and co-create value.

Originality/value – Our study addresses a substantial gap in the literature about the role of institutions in the evolution of a service ecosystems as they impact both on resource integration and value co-creation.

Key words –S-D Logic**,** Service ecosystem, Institution, Value co-creation

Paper type – Working paper

1. Introduction

In this paper we explore how service ecosystems evolve and influence resource integration and value co-creation.Service ecosystems have been defined as "spontaneously sensing and responding spatialand temporal structure of largely loosely coupled, value-proposingsocial and economic actors interacting through institutions, technology,and language to (1) co-produce service offerings, (2) engage inmutual service provision, and (3) co-create value" (Vargo, Lusch, 2011:185). The definition suggests that service ecosystems reconfigure themselves, they are dynamic and potentially self-adjusting. Service provision and value creation through resource integration impact the nature of the system.This, in turn,determines a change in the context for future value creation processes.

In past studies on value networksthe attention has often been on the resources actors share (Cantù et al., 2012). However,further research is needed to investigate more throughly the mechanisms and rules (institutions) governing the resourceintegration and service-provision processes. Recent literature highlights that value is created from the evaluation, manipulation, and deployment of potential resources occurring in contexts in which actors are embedded (Chandler, Vargo, 2011). By context we refer to a set of specific actors with distinctive reciprocal links among them (Carrington et al., 2005) that frames exchanges, service provision and resource integration. Importantly, it also includes shared institutional logics that govern resource integration and mutual value creation through service exchange. They are 'rules of the game' that allow actors to interact in an organized way and coordinate interactions at various levels.Markets and marketing are intertwined with many institutions that establish norms, guidelines and other mechanisms to regulate social interaction.Therefore, exploring the role of institutions in the evolution of a service ecosystems matters as they impact both on resource integration and value co-creation. Empirical evidences aimed at observing how institutions emerge and affect resources integration and value co-creation in service ecosystems are scarce. In order to fill this gap, we will analyse the Lego Group service ecosystem; in particular we will observe how over time Lego service ecosystem has evolved and the role thatinstitutions have been playing in governing resource integration and service-provision processes. In doing so we will focus on some of key actors in the ecosystem, namely the company,two relevant communities(Afols and Gamers) andthe distributors.

2. Institutions and Service Ecosystems

According to S-D Logic, institutions are, at the first level, governance mechanisms for service for service exchange and value co-creation.More specifically, S-D Logic suggests that all economic actors are fundamentallydoing the same things: co-creating value throughthe integration of market-facing, public, and private resources through self-service; using resources for currency to access additional resourcesthrough service-for-service exchange. It follows that value creation is seen in terms of - complex, dynamic, service-for-service - networks and markets in terms of service ecosystem (Vargo,Lusch, 2011). The service ecosystem perspective is particularly useful in considering value co-creation processes because it allows to consider how large-scale social structures and institutions moderate markets formation (Chandler, Vargo, 2011).

Institutions can be defined as "socially shared patterns of behaviours and or thought…..patterns that are not only followed, but also include prescribed and described rules" (Dequech, 2009). It is important to understand that norms and rules should be not interpreted as externally imposed. Actors generate those to facilitate the value co-creation process. For instance, actors develop kind of rules in interaction and then they develop signs

of those rules which became additional heuristic shortcuts for interacting. Institutions include both a behavioural and mental dimensions. In this sense, institutions provideshared mental models. Property rightsare institutions too: as part of theinstitutional framework of society, they shape the rangeof action for actors making the transactional exchange possible (Haase and Kleinaltenkamp, 2011).

But institutions are not static,they aredynamic, changing and changeable. Jarzabkoski (2008: 623) asserts "*institutions guide actions, yet this relationship is not deterministic, as actors remain acknowledgeable, reflexive agents who have the capacity to choose to act otherwise, thus either sustaining or modifying institutions through their actions*".In interaction, actors act in a way to allow the persistence of institutions or their change (Orlikowski, 1996).Araujo (2011: 214) state that there is "*tension in Callon's arguments between markets as institutions and market as dynamic, learning spaces where supply and demand are continuously reshaped*". On the one handinstitutions are considered as structure that needs a certain stability to affect actors' behaviour and their capabilities (Loasby, 2000). On the other hand, there is the idea of markets as emergent contexts where the capabilities of actors are developed in interactions. Even though the two views have been considered as co-existing, it is not however clear how they are related each other (Callon and Musiesa, 2005).We agree with Azimont and Araujo (2007) that stability and change co-exist in the way markets are formed, but again there is a controversy: on the one side multiple and often contradictory versions of the market co-exist and compete, on the other side they need to be partially reconciled in concrete situations for the markets to work. We position our study in this debate and by exploring the role of institutions we will also try to better understand how this multiplicity is resolved.

3. Methodology

To investigate the role of institutions in the evolution of service ecosystems we use practice theory. Drawing from constructivist market studies in economic sociology, markets are seen as emerging orders formed by on-going practices.Market practices are all activities that contribute to constitute markets (Callon, 1998; Kjellberg and Helgesson, 2007). They can be divided into three main categories: *exchange practices*, concrete activities related to consummation of individual economic exchanges;*representational practices*, which consist in the activities that contribute to depict markets and/or how they work, producing unambiguous images of the market (Kjellberg and Helgesson, 2006); *normalizing practice*, i.e. guidelines for how a market should be (re) shaped or work according to some (group of) actor(s).It has been stated that all practices are institutions (Kjellberg and Helgesson, 2006; 2007). They are repeated activities, institutionalized activities. While on the one hand practices are based on the idea of institutionalization; on the other hand, there are some specific practices that do into institutionalizing.

In this study we adopt a practical constructivism perspective (Kjellberg and Helgesson, 2006), following the assumption from sociology of science and techniques that mode of exchange should be observed in the making rather than as ready-made.

We applied our study to the Lego case as it offers a rich perspective of the object under investigation and the company's engagement in many activities of value co-creation and service for service exchanges. Moreover, the heterogeneity of the actors involved in the service ecosystem makes it even more interesting to explore the rules governing and coordinating their action.

In particular, we opted for a mixed methods design (Creswell, 2003) that combined different techniques: longitudinal in depth interviews to key informants (20 in total) inside the company(general manager, brand manager, sales manager, public relations manager…) and outside (consultants, distributors, communities' participants, consumers..), ethnography of

interactions (main Lego events: Lego friends launch event, PlayModena and Ballabioexibition); netnography of online communities. Interviews have been carried out by the two researchers, rather direction observation done in two different moments so as not to influence each other. We analysed the service ecosystem focusing on the different types of value for the different actors with different loci of value creation. We use narratives to highlight "on-going activities as multifaceted and to some extent incoherent" (Kjellberg and Helgesson, 2006: 848).

4. Lego: a "system-atic" evolution

The Lego Group is the world's third largest toy manufacturer (bricks) in terms of sales. During the '50 and '60 the focus of the company was on the business development in terms both of new products and sets and of new geographical markets. The strategy adopted was internally focused (as highlighted by the slogan "LEGO developed, LEGO published") and their main activity toward the customers was to reply complaints about products and services.This approach remained quite unaltered until the late '80s when the company realized that new opportunities were emerging through the progressive engagement of different stakeholders, primarily customers, fans and their respective communities.

In August 1988 the first worldwide event took place: 38 children from 17 different countries participated the Lego World Cup building contest. From that moment, many other contests, workshops and creation labs followed. In conventions -such as BrickCon, BrickFair and BrickWorld- LEGO's hobbyists, fans, artists, and other enthusiasts gather in a large space to display their models and participate in a variety of games, presentations, and activities.

"By that time we were basically interested in better addressing the Lego consumers by engaging them in activities - such as contests, workshops, creative groups(exchange practices)aimed at enhancing the openness of the company to the external context in order to support innovation" (Paolo, General ManagerLego Italy)

On the customer side, until this period the Lego fans, especially the so-called AFOL (Adult Fan of Lego), found it difficult to meet other people sharing the same interests on the bricks. All the events organised by Lego had the result to gather together the AFOL, thatstarted to emerge as an autonomous community.

"At the beginning there was no community, we just did things by ourselves.We were dispersed across the country and we found it difficult to meet and exchange ideas about our interests in Lego building so we started to organize informal meetings(exchange practices) and to project the first exhibition of our artefacts(representational practice)" (Luca, AFOL)

One of the favourite representational practices of AFOL was (and is) to show their artefacts not only to the other members of the community for appreciation and technical suggestions but also to other individuals, both adults and kids. This practice proved to be particularly interesting for the company to support its innovation processes.

With the advent of Internet, things developed rapidly, and in the early 90s the first online platform based on a discussion group (alt.toys.lego) was created by the fans themselves.

"Internet was the perfect solution to our problems. We started to use it to meet other AFOL sharing the same building specialization, to ask for info about technical building solutions (exchange practices), to post photos of our artefacts (representational practices), to search for the bricks we needed for our creations (exchange practices)..." (Marco, AFOL)

Subsequently, after the launch of a series of intermediate platforms based on different contents, in 1998the network LEGO User Group, Lugnet, was created. It is an online community managed by enthusiasts and hobbyists. The objective was to help AFOLs to share their ideas, to exchange information on LEGO products and also to sell and market their own LEGO sets. Thanks to its structure it also enabled the specialization in the different sets, being able to focus on different areas of interest.

"When we decide to return to the Lego bricks as adults, after the Dark Age (the period generally 16-23 years old in which kids all over the world abandon Lego considered as a symbol of their childhood) we specialise on building in a particular style or a particular theme(representational practices), participating in a specific activity, or developing a certain LEGO set." (Matteo, AFOL)

The emergence of Lugnet allowed the company not only to realize not the relevance and strength of the AFOLs but also the opportunities from their existence as a formalised group, with its social norms and rules to be addressed in its strategies and policies.

"The headquarter in Billund monitors the community to scout for new interesting constructions/ideas(exchange practice)" (Andrea, Brand Manager).

It is interesting to note that over time informal rules on how to communicate in their forum have become even more detailed.

"It is not just enough to say 'this is a nice creation' you have to really provide a constructive comment to the author(normalizing practice). Also, we don't want people to write messages which are not clear, contain language mistakes, or without a nice layout(representational practice). Everyone should be able to understand the message. People that make mistakes on these aspects are punished by the other members of the community(normalizing practice)" (Davide, AFOL).

On the base of the experience with the AFOLs, Lego created a virtual space on its website to allow every individual to post photos and give suggestions about new ideas on products or improvements of existing ones.

In the late '90s the LEGO Group started to perceive the first signals of alarm experiencing a deficit for the first time ever. The crisis progressively led the Group near bankruptcy in 2003. Many of its innovation efforts – theme parks, Clikits craft sets (marketed to girls),and other products were unprofitable or failed outright, often due to some misalignments with the other actors.The time seemed right to revisit the strategy of the company.

In 2004 the Action Plan of a seven‑year strategy known was launched: Shared Vision.Itaimed at rebuilding the company, revitalizing the LEGO brand and refocusing on the market. The strategy for the years up to 2006 stressed the need for concentrating on improving profitability within the organization at the different levels and in the different countries. The second step of the strategy –"back to core"– lasted from 2006 to 2008 and was devoted to building a profitable and sustainable core platform which could provide a basis for the growth that would have started in the last stage of the strategy.

"The scope of 'Shared Vision' was to back to what we can do better, the brick" (Paolo, General Manager Lego Italy)

In this phase, the company decided to focus especially on consumer sales, instead on profitability. This shift in the LEGO strategy has represented an important driver of evolution towards a really customer-centric company.

"We have developed a documentlabelled 'customer value proposition' which explains how we should behave to implement the consumer sales driven business, from the top manager to the switch board operator(normalising practice)" (Camillo, Marketing Manager)

Interesting enough is also how distributors have reacted to the new strategy:

"While our goal is to improve consumer sales, mass distributors are mainly interested at increasing their turnover. They consider toys as call birds to be sold to the masses. Even buyers only think of finalizing the deal, while there are so many activities to support our brand we could do together" (Luca, Sales Manager)

However, over time, interesting opportunities for the company also emerged from the development of new channels.

Our product is perfect for Amazon: on the box there is just a general code and a picture, no descriptions and no names(normalising practice), it can be sold all over the world (Luca, sales Manager).

The next phase, called "Step Up" was based on an organizational change in order to prepare the LEGO Group for future growth, by a process of decentralization of decision-making and responsibilities on results.

Collaboration established long time ago with the AFOL communities, now extends to events, exhibitions and advertising of new products, and LEGO fans very often give their input and feedback on product and building practices. In 2011 more than 200 public events were organized by LEGO fans, and more than three million people (typically families with children) visited these events.With regards to the well-known community, Lugnet, although it is not the only community in the Lego Universe (we can consider for example the LEGO Train User Group and The LEGO Mindstorms User Groups), over the years it has gained a

central position in the network: it boasts a large number of members and encompasses links to all the various sub communities and interest groups that revolve around the LEGO world.
After an intermediate stage (mid-2000) in which the community has been concentrated on consolidating the organization and expanding the network, now the AFOLs are even embedded in many activities of the LEGO Group.
In the last years, the LEGO Group has actively developed relations with approx. 100 "AFOL" groups with a total of more than 100,000 registered members. The groups have their own websites, blogs and discussion forums. The most popular LEGO fan blogs have more than 150,000 unique visitors each month. LEGO fans are also very active on YouTube where almost one million LEGO tagged videos now are to be found.In 2005 the LEGO Group announced its "LEGO Ambassador" Programme for AFOLs worldwide. The purpose of the project was to expand mutually useful relations between the LEGO Group and its loyal, talented and committed fans through a sort of 'institutionalised connector' devoted to manage the multiform relationships between Lego, AFOLs and other actors, such as kids, media, distributors, parents, schools etc.. All LEGO User Groups are entitled to be represented by one person in the LEGO Ambassador Programme. The current LEGO Ambassador Programme has 86 members from more than 30 countries all over the world.

"On the official Lego website there is a forum dedicated to ambassadors, where each of them has its own 'room and they can exchange ideas with the other Ambassadors and the company(exchange practices)" (Andrea, Brand Manager)

Furthermore, some LEGO fans have turned their passion for building and creating with LEGO bricks into a full-time or part-time profession. One of those, Andrea Ligabue,has been appointed LEGO Certified Professionals and officially recognized by the LEGO Group as trusted business partners. The launch of Lego Games, a product line consisting of board games that players construct from classic LEGO bricks, have been supported by an independent community of gamers that have been addressed with this purpose by the company. Ligabue was the leader of this community and also art-director of the PlayModena exhibition.

"The relationship with Ligabue was born because we needed to enter in a network we didn't know, games.Ligabue is an expert, he has more than 3000 games. For *him it has been a great opportunity to convert a passion in a job". (Paolo, General Manager Lego Italy).*

"People are not used to read instructions; thus Ligabuegot the idea of putting videos on YouTube about how to play with Lego Games (representational practices) so that people can listen to them rather than try to understand autonomously how to play (normalising practice)(Andrea, Brand Manager)

I connected Lego to many associations of gamers and in particular to game rooms(Andrea Ligabue, Leader Gamers Community

5. Discussion and conclusions

The Lego case well depicts how by adopting a service ecosystem perspective a company may play a proactive role in value co-creation processes.
The first attempts in the '80s to develop practices aimed at integrating resources with its customers may represent a crucial moment in the evolution of value creation processes. By that time Lego has started to evolve from a company centric perspective in managing the business and especially innovation to a customer centric perspective that, in these last years, has allowed Lego to successfully cope with a serious crisis.
New opportunities have been opened up by the development of a series of exchange, representational and normalising practices that have led to the emergence of some institutions. Among them a particular role in supporting the evolution of the service ecosystem has been played by the LUGnet community, the 'Shared Vision' strategy and the figure of the 'Ambassador'. They allowed actors in the service ecosystem to better coordinate in resource integration and progressively enhance and accelerate the value creation processes. Institutions have then generated further practices, which in turn contribute for further institutionalization

processes. As a matter of fact, institutions have proven to be, at the first level, governance mechanisms for service for service exchange aimed at value co-creation. As highlighted by the Lego case, institutions have reconciled the different positions of the actors in the different contexts of the service ecosystem and have provided stability in order to affect actors' behaviour. At the same time they have given actors room for the emergence of conflicts, as in the case of the distributors, that have led to new and more effective configurations of the ecosystem. It is in this fluidity that service ecosystems evolve and thus markets evolve: the aim of the company is to acknowledge the dynamics of change, to understand which institutions are emerging in the service ecosystems and which are the implications in managing its business, and finally which exchange, representational and normalising practices the company have to develop in order to sustain the evolution of the service ecosystem and the value creation processes.

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