STRUCTURING MULTIPLE ENTITY GOVERNANCE FOR LARGE EVENTS: THE CASE OF TOURISM IN MINAS GERAIS FOR THE WORLD CUP 2014

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ABSTRACT

Large events like the World cup or Olympics always present a coordination and governance problem involving multiple entities from multiple levels of public administration like a Municipality, State, Federal government, and international organizations. It also involves both the public and private sectors.

This usually results in dozens of stakeholders with asymmetric capabilities, needs, interests and goals. The coordination and governance in these cases presents a special problem within the governance and structuring theories.

This article analyses this problem in light of the existing theories and shows how this problem was addressed within the tourism public policy in Minas Gerais for the World Cup 2014. This event has not yet occurred but planning and preparation is already underway.

The methodology used is the case study, which requires the case to be capable of generalization in order to be relevant. This is possible because it can be used as a model for other public entities in similar large events, and the tourism public policy is interesting because it necessarily involves public and private stakeholders, in which the State and Municipality must share responsibilities and act mainly as coordinators of the economic chain.

Particularly, the World Cup not only repeats itself, but also can be used as a model for other large international sports events like the Olympics as well as other international championships in many different sports.

This case involves the World Cup 2014 in Brazil where the public stakeholders are Brazilian Federal government, Minas Gerais State and Belo Horizonte municipality, as well as many private stakeholders such as private companies of the tourism economic chain, associations of this economic chain and liberal professionals. The number of the main stakeholders was above 70. They all had very different capabilities, needs and goals in a very asymmetric nature.

The case shows how the five elements of a structure were used to conceive a superstructure of governance and coordination above an infrastructure of the tourism economic chain. This larger organization made of many smaller organizations forming a super-organism.

In the contingency theory organizations are currently analysed as analogues of biological organisms. In this view such relations could be interpreted as analogues of super-organisms, such as hives or colonies.

In game theory terms this can be viewed as a variation of the traditional coopetitive relation of the market described by the prisoner's dilemma, since the government can act as a coordinator so that, at least temporarily, the game can form a situation that induces cooperation between agents. However, this situation is not a Nash-equilibrium and so it's unstable in the long run, but viable during the short duration of an event.

In the agency theory this can be viewed as a chain of relations linking the principal (society) through its intermediate agents (governmental entities) to its final agents (market) and finally delivering the service back to the principal (society).

Initially, the five main elements of the Mintzberg structure were used as a guidance to allocate the myriad of stakeholders in their respective roles and separate which of those would have a role that fitted the five main components, that is, the strategic apex, middle line, supporting staff, techno-structure and operating core.

Afterwards the organizations located in each of the five components were related to each other through hierarchical connections, working groups or independent lines of command depending on their relations to each other.

When this was done it constituted a superstructure of command, coordination and governance through which the money, projects, communications and people would flow from the top strategic apex to the operating core. These flows would generate incentives as per the game theory in order to coalesce the structure together during the event.

Finally, it was noticed that this structure was operating above an infrastructure of the economic chain and so it constituted a superstructure above an infrastructure. Organizing how the operating core related and worked with this infrastructure was the final task in developing the model.

After this model was conceived it came to the moment of publicizing it and implementing it, which is currently underway. Since the World Cup event is still due to occur in 2014, this experience can be observed and analyzed how it will work and which problems will arise.

The conclusions that can be drawn so far are that the Mintzberg structure although conceived to used within a single organization can also be used to draw a multi-organization and multi-level superstructure in order to organize a larger entity. This entity can, either exist temporarily as in the case of an event, or be permanent, which is the case of a public entity regulating and organizing an economic chain.

In this case, many organizations work together as a single super-organism that is the analogue of biological super-organisms. This view opposes itself to the typical ecosystem, of food chain analogy, because it can be interpreted as a positive sum game of mutual benefit instead of a predation game in which the game is zero or negative sum. It also constitutes a special case for the agency theory.

Keywords: Structure, governance, collaboration

INTRODUCTION

With the coming World Cup 2014 in Brazil the State of Minas Gerais and the Municipality of Belo Horizonte, contacted Fundação Dom Cabral (FDC) to help them prepare for the event. Part of the work was to help them to create a coordination and governance structure.

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The method of study is the case study, which requires the case to be capable of generalization in order to be relevant. This is possible because it can be used as a model for other public entities in similar large events, and the tourism public policy is interesting because it necessarily involves public and private stakeholders, in which the State and municipality must share responsibilities and act mainly as coordinators of the economic chain.

Particularly, the World Cup not only repeats itself, but also can be used as a model for other large international sports events like the Olympics as well as other international championships in many different sports.

This case involves the case of World Cup 2014 in Brazil where the public stakeholders are Brazilian Federal government, Minas Gerais State and Belo Horizonte municipality, as well as many private stakeholders such as Private companies of the tourism economic chain, associations of this economic chain and liberal professionals. The number of the main stakeholders was above 70. They all had very different capabilities, needs and goals in a very asymmetric nature.

OVERVIEW OF PREVIOUS RESEARCH

This article will look at the problem with four different theories within the organization theory: contingency theory, agency theory, game theory and organizational structural elements. We intend here to give a brief overview of the problem through each one of those.

In general, instead of analyzing one organization we are dealing with a network of organizations, or a super-organism, that is, an organism composed of several organisms.

CONTINGENCY THEORY

The contingency theory is the current paradigm in administration. Burrel and Morgan (1982) describe the close relationship of the organisms in the administrative sense, and in the biological sense, so that they have to coexist with similar entities and thus cooperate, compete and co-evolve. In fact organisms, in both senses, adapt to the environment, which is, by its own part, basically composed of other organisms.

Therefore, a coevolving ecosystem appears as the paradigm in interpreting the organizational systems.

Our case is a network of organizations that have to interact in an orderly way. Trying to understand each of the organizations as a separate entity may look an impossible task, but when looking at them as a super-organism, or ecology, the task becomes easier. Their asymmetries are in fact a necessity of coevolving organisms into ecological niches. Each one will have a complementary function to the whole.

Also, the super-organism is not without internal competition as we could expect from a single organism, but rather it has the dynamics of competition, cooperation and thus, their hybrid, coopetition.

The contingency theory states that organizations will adapt themselves to the environment, in our case the super-organism, despite its size, is still a fraction of the whole economy and society and so it also must co-evolve to adapt.

The main difference between living organisms and the organizations is that completely different processes do their evolution, and reproduction, so the analogy has a limit and we must understand the administrative phenomenon by itself. For example living organisms cannot choose which adaptation they will have as an adaptation to their environment, while organizations can choose and change idea during their lives since its structure is not written in a DNA.

In fact when we try to change the system structure we are trying to do some mutation that is perfectly possible for organizations but is at best difficult, if not impossible for a living organism or super-organism. While biological evolution is governed by randomness and selection, organizational evolution is governed by choice and selection.

Another important point of divergence is the difference in the logic of food chain and value chain. While the food chain implies in predation and thus competition, the value chain is more akin to cooperation and aggregation. None is a zero sum game, in which one must lose for the other to win. Both are positive sum games, but the value chain clearly induces more cooperation than competition. In biology the predator-prey balance must exist, while in the economy the organism can grow together, in fact the growth of one favors the growth of the other.

AGENCY THEORY

Another important part of our analysis is the agency theory. Laffont and Martimort (2001) identify that the relation between the owner of an asset (principal) and its manager (agent) have lots of common interests, but also divergent and egoistical ones, and that creates a tension between both. While the principal instructs the agent to do certain tasks and have certain priorities the agent has his own agenda of priorities.

In our case we have a multilayered agent-principal relationship.

The first layer is the relation between the citizens and their elected representatives and the bureaucrats in the government agencies. The second layer is between the government agencies themselves as they go down the governmental hierarchies. The third layer is the link between governmental agencies and the markets where regulation and coordination exists, but here there is no ownership relation.

In the first link the relation is done through electoral and admission processes. These processes have their imperfections and asymmetries but are well defined, and precede the event in many years. There is little to be done here, since these processes will not change due to an event.

The second link depends on an intra-governmental coordination and cooperation within each sphere of power, that is, Federal, State and Municipal. These relations are better when the political alignment is good.

When this alignment is poor the event can became threatened. A high political alignment is hard to find in democracies, but possible to achieve during large events because this involves cooperation in the short term, and for a highly visible situation, in which nobody want to get the blame for the event not being a success.

The biggest problem is in the third link, since the relation between the actors is poorly aligned. Even when this involves commercial and professional associations, which should, at least in paper, represent a group of individuals, this link is not strong. Here the government has a very weak capacity of coordination and the private agencies represent their associates in a very general way at best. Therefore egoistical and short-term utilities are stronger here.

In general the agency theory helps to understand the conflict between the parts making a counter-point to the strong cooperative view of the contingency theory.

With two opposing forces at play a game is formed.

GAME THEORY

The game theory is also a powerful way of explaining the interactions between organisms. In fact the advantage of looking at the problem with this theory is that we can model the tensions between competition and cooperation that exists within the super-organism.

The first model will be the event game, a variation of the prisoner's dilemma, a traditional game theory model (Ordeshook, 1995; Tirole, 1994). In this game shown in figure 1 two organizations must either cooperate or not for the success of an event.

Figure 1 – The Event Game – a prisoner's dilemma variation

This game is used to model situations where there is a tension between cooperation and competition, because the Pareto optimal arises from suboptimal choices by the individuals, while the optimal choices would lead to a Nash equilibrium that is a worse result than the Pareto Optimal. Therefore the players must refrain themselves temporarily from optimizing their own results in the short term in order to maximize their gain in the interaction.

However, our situation is more complex because we need a third player that is the government that can either implement incentives for the cooperation of the players. Let's name this the game G described mathematically in figure 2.

Player A (government) can choose between creating incentives to cooperation, or not.

Players B and C (the organizations) can choose between cooperation and non-cooperation. If they cooperate they will share ten points of utility and there is no cost in that division. If one of them does not cooperate he will spend four points to capture the other player's five points. If only one of them does that he will have a net gain of one point in detriment of the other. If both do that they will spend each four points with no gain at all.

Player A gains five points of value (political and taxation gains) if B and C cooperate, and zero points otherwise. Player A can create incentives by granting four points to players B and C but only if they cooperate.

Figure 2 – Game G – Events with incentives

Government

	Without incentives			With incentives	
	Organization 2			Organization 2	
	Cooperation	Non cooperation		Cooperation	Non Cooperation
Organization 1 Cooperation	5,5,5	0,6,0	Organization 1 Cooperation	7,7,1	0,6,0
Organization 1 Non Cooperation	6,0,0	1,1,0	Organization 1 Non Cooperation	6,0,0	1,1,0

An analysis of game G shows that without incentives the situation is the prisoner's dilemma and therefore the government cannot be sure that they will cooperate. So the government can create incentives to change the game to a situation in which the players will have a better situation if they cooperate than not. However, the situation is not optimal for the government itself, and so it's a not a pure Nash equilibrium. This is not stable in the long term but can be stable in the short term of a large event, that is, there is a benefit for creating incentives during a large event but once the event is gone the incentives will not last. Game G doesn't have a pure Nash equilibrium, but rather a mixed strategy Nash equilibrium.

ORGANIZATION STRUCTURAL ELEMENTS

Henry Mintzberg (1981) introduced the logic of analyzing an organization by dividing it into five elements: strategic apex, middle line, operating core, techno-structure and support staff.

Figure 3 – The five elements of an organization
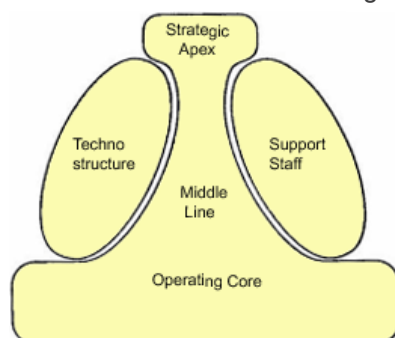
The strategic apex represents the element of the organization responsible for creation of directives and making the strategic decisions. Here we find the political and legislative power of the organization.

The middle line is the central element of the organization and communicates with all other parts. Here we have a high coordination power and they must be linked to the operational and support elements. Here we have the executive and coordination power.

In the base is the operating core, which is responsible for the activities coordinated by the middle line, and directed by the strategic apex. In this element we have parts of the organization with operational capacities and high capillarity. Here is the operational power.

In the left side is the techno-structure element that supports the whole organization with equipment and technology. It's coordinated by the middle line but interfaces with all other elements. Here is the power of technology and infrastructure.

In the right side we find the intellectual staff or support staff. This element interfaces with all other elements and is coordinated basically by the middle line too. Here we find the power of knowledge.

This model was devised to understand an organization, but an organization of organizations can have the same logic. In a single organization we allocate the several departments in the logical elements described above, the organization is in fact a super-organization made of departments or business units. The only difference is that this new organism has parts that are independent of each other, which makes it more loose and less coordinated, since they do not need each other to exist. One possible example is a shopping center that is also an organization

made of several independent organizations that have goals in common, but also compete with each other.

In this way it will be possible to groups the several stakeholders into the five elements and perceive which new parts have to be assembled in order that the puzzle becomes complete. This will help categorization, and gap identification, when creating the whole governance model.

infrastructure is beyond the reach of direct coordination.

The final complete model is show in figure 4. The many acronyms of the organizations are shown in the appendix. All federal organizations are show in green, state organizations in purple, municipal in orange, private in blue and mixed in grey.

METHODOLOGY

The method used for this work is the case study.

Our case is defined as the creation of a governance structure for the World Cup 2014 in the State of Minas Gerais for the tourism public policy. This event has not yet occurred so the results cannot be fully appraised. The case will focus on how the organization of the governance and coordination chain was organized.

For a case study to be relevant it must be capable of generalization. Our case is of general interest and use because large events are common and in particular the world cup occurs each four years. Also, the tourism public policy can be important to coordinate not only for sports events, but also for political, cultural and social large events.

FINDINGS

The central logic in creating a governance and coordination structure was identifying how the more than 70 stakeholders would interact. In the end there were three structures that worked together: a superstructure, the value chain, and an infrastructure.

The superstructure was modeled using the five elements and looking at each stakeholder as one department, or part of a super-organism. The function of each was easier to be determined by the logic of the five elements. Gaps were also identified and new temporary organizations such as committees and groups were created.

This superstructure organizes, regulates and coordinates the value chain below it. The value chain is of course, organized in a chain of organizational types that have synergy between them.

This value chain can only operate however if the infrastructure below it can operate properly. This

Figure 4 – Superstructure, Value Chain, and Infrastructure
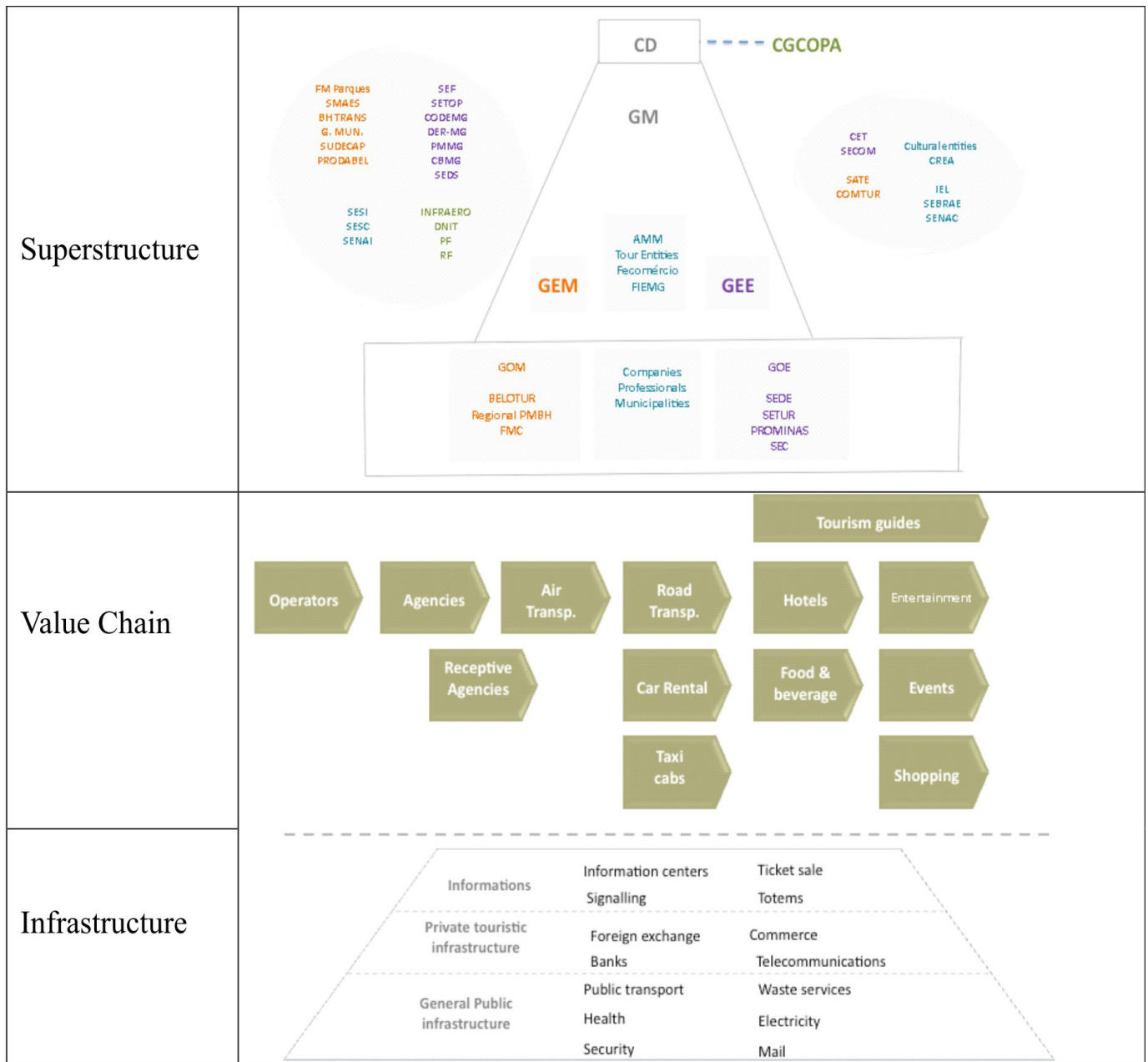
The strategic apex is composed by the deliberative council (CD). It congregates representatives of many organizations and deliberates the decisions for the whole network. The CGCOPA is a federal organization that isn't a part of the structure but also operates at the strategic level and relates with the CD in the same level. There is no hierarchical subordination between the CD and the CGCOPA.

The middle line was divided in two parts. The upper part is composed by the Modeling group (GM) that is linked to lower part, where are the executive groups of the State (GEE) and municipality (GEM). All these three entities were assembled specifically for the World Cup and did not existed before. By assembling the several stakeholders in the five elements logic it was noticed that there was a gap in this part and so the coordination and governance would be impossible without them.

Also in the lower part are located the municipalities association (AMM) and the federations of commerce (Fecomércio), and industry (FIEMG), as well as several tourism entities, mainly Brazilian associations of one part of the value chain. These are not hierarchically subordinated to the government but are coordinated by the GM.

The GEM includes three organisms: Municipal Executive Committee of the World Cup (CEM), Belotur and FMC.

The GEE is also formed by three organizations: SECOPA, SEC and SETUR. In this way they are symmetrical entities including one organization dedicated to the World Cup, one of tourism and one of culture. Since they work at the same level they form the central hub of the whole super-organism.

The techno-structure includes several organizations at three levels of government. The state and municipal links are managed by the GEE and GEM respectively. In the case of federal government it's up to the union to decide. There is also the "S system" which involves SESI, SESC and SENAI, these are controlled by the federation of industries (FIEMG), and are private organizations designed to support the development of the industry.

Many of the organizations here see the World Cup as a potential leverage factor to help them improve their structures. Among possible examples are, the airport authority (INFRAERO), Data processing centers (PRODABEL), Police (PMMG) and the Fire department (CBMG). The development agencies (SUDECAP and CODEMG) have a particularly high stake here. Public works agencies (BH TRANS, DER-MG, DNIT, SETOP) will convey a lot of resources to prepare the infrastructure for the event.

The support staff, or intellectual support, is similar. The State and municipal organizations are also linked to the GEE and GEM respectively. Units from the "S system" (IEL, SEBRAE and SENAC) are linked to the FIEMG. The cultural entities are associations of organizations related to the cultural value chain.

The organizations here will not be leveraged by the event but will have to provide a lot of support during the year preceding the event and during the event. Those relating to human resources training like SATE, IEL, SEBRAE and CREA will have to plan the training and development programs. Those related to vehicle traffic (CET) and to communications (SECOM and COMTUR) will need a boost in their capacities during the event.

The operating core is composed of several operational organizations linked to their respective spheres of power. The Municipal Operational Group (GOM) is composed of the Belotur, local stations of the municipality and the FMC. This is to provide capillarity during the operations. The State Operational Group (GOE) includes the SEDE, SETUR, PROMINAS and SEC. Here once again the GOE and GOM are mirror organizations at the operational level.

The value chain can also represent this operating core. as the many associations and professional groups are intermingled into this chain. It's not possible to fully describe these sectors, as it would involve thousands of organizations. At this level we go down to the capillarity of the super-organism as it mixes with the ecosystem.

The ecosystem into which this super-organism is living supports it as the infrastructure described in figure 4. The dashed line is used to distinguish what will be more visible to the tourists during the event (Value Chain) from what is almost invisible to the users (infrastructure).

To further detail this infrastructure it was divided into three parts each more distant from the view of the tourists, but not less important, they are: information, private touristic infrastructure and general public infrastructure.

Here the links also exist from the superstructure above as the governmental entities can link to the general public infrastructure as well as the private associations link to the private touristic infrastructure. Both of them are related to the information level. Also at this level the society also interacts with the structure.

At this point the super-organism is detailed in its parts much like a study in comparative anatomy but in this case we are capable of changing the places of some of the internal organs.

The next step is still under way and cannot be fully analyzed. The model was shown to the several stakeholders, and is being implemented as a coordination network, as well a base for information, people, projects and financial resources flow. These flows are vital to create incentives like discussed in game theory and maintain the cohesion of the units in the previous time-span and during the event.

CONCLUSIONS

We have analyzed how to structure multiple entity governance for large events using four theoretical concepts: contingency theory (super-organism), agency theory (egoism), game theory (incentives) and structural elements.

We have followed the case of the tourism public policy for the World Cup 2014 in Minas Gerais. In the case a large group of more than 70 stakeholders were grouped using the five elements into a network that resembles a super-organism but has its connections with the ecosystem in which is exists.

Gaps were identified in the five elements structure that induced the creation of special executive and operational groups that will exist only until the end of the event.

Flow of resources and information form the basis of incentives to assure that the agents will cooperate in

the short-term, until the end of the event. Since this floe uses the structure created it also reinforces the structure.

As a final note we can see that the four theories worked very well together complementing each other and it was possible to make the bridge between them and the real world.

APPENDIX – ORGANIZATIONAL ACRONYMS

AMM   - State municipalities association

BELOTUR   - Municipal Tourism Secretariat

BHTRANS   - Municipal Transport Company

CBMG   - State Fire Department

CD   - Deliberative council

CEM of the World Cup   - Municipal Executive Committee

CET   - State vehicle traffic Company

CGCOPA Committee   - Federal World Cup General

CODEMG   - State Development Company

COMTUR   - Municipal council of tourism

CREA   - Regional Commission of engineers and architects

DER MG   - State Department of Roadways

DNIT Roadways   - Federal department of

Fecomércio   - State Commerce federation

FIEMG   - State industries federation

FMC   - Municipal Culture foundation

FM parques   - Municipal Parks Foundation

GEE   - State executive group

GEM   - Municipal executive group

GM   - Modeling group

G. Mun.   - Municipal guard

GOE   - State Operational group

GOM   - Municipal Operational Group

IEL   - FIEMG's innovation institute

INFRAERO Company   - Federal Airport Infrastructure

PMMG   - State police (Polícia Militar)

PF   - Federal Police

PRODABEL Company   - Municipal Data Processing

PROMINAS   - State Promotion Company

Regional PMBH   - Local stations of the municipality

RF   - Federal revenue department

SATE   - Municipal work and employment secretariat

SEBRAE   - Federal Service of support to small business

SEC   - State culture secretariat

SECOM   - State Communication Secretariat

SECOPA   - State World Cup Secretariat

SEDE   - State Development Secretariat

SEDSS   - State Social development Secretariat

SEF   - State Revenue Secretariat

SENAC   - Federal service of commerce apprenticeship

SENAI   - Federal service of industrial apprenticeship

SESC   - Federal commerce social service

SESI   - Federal industry social service

SETOP   - State public works secretariat

SETUR   - State Tourism secretariat

SMAES   - Municipal Sports Secretariat

SUDECAP   - Municipal Capital development autarchy

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