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TRILHA PRINCIPAL

Brazil World Cup Challenges

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***Abstract* — Overcoming the productivity challenge is the main benefit of the 2014 World Cup for Brazilian people. The sustainable development of our cultural tourism industry will catapult the new middle class growing up rate.**

***Keywords* – Cultural tourism, Productivity, FIFA World Cup**

I. Introduction

It is a widely known fact that the 2014 FIFA World Cup Will take place in Brazil. Unfortunately, only a few people understood that the real legacy of this event goes beyond infrastructure construction. The city of São Paulo has had a huge success in the corporate tourism business for the last twenty years. There are no doubts of its relevance and financial importance for the city. The big legacy that the World Cup would leave for Brazil's largest city will be cultural tourism. Everyone expects that this example may be followed by other cities that exploit their natural beauty as major catalyst factor for tourism.

In the city of São Paulo and its adjacency there are several aspects that are unknown by most Brazilian and international tourists. There is a rare cultural diversity in terms of cooperative coexistence among several races. The city and its surrounding are host to a friendly and integrate coexistence to people that are at war in several other places in the world. The most striking but not unique example is the relationship between Jews and Arabs. São Paulo metropolitan area also gathers a large population of Italian, German, Japanese, Greek, Korean, Chinese, French, African descent, among others. We can say that is a special region that hosts practically every existing cultural among the human population.

It is not news that food is a big factor for family, people and cultural union, integration and aggregation. A lot of positive things happen around a good dinner. In São Paulo and its neighboring cities, including the Santista valley, there are restaurants of all different cuisines, from the traditional food from a specific region up to the Brazilian version of those plates. Traditional dishes such as pizzas, kibe, puffed pastries and others and sweets such as the "brigadeiro" are easily available both in their traditional version as in the locally adjusted version. Around this culinary diversity we have cultural tourism with shows, cinemas, museums, books, singing festivals, parties and other events. It is a tourism format that exists in few places and generates as its huge legacy the recurring visits from each tourists. Many São Paulo natives are unaware of this cultural vastness.

Cultural tourism is a wide area, including even the political tourism. Many tourists may be interested to know the places where Worker Party leaders took political stances of huge importance. For instance, many people may want to know where former president Lula lives and its surroundings, such as the city, the factory where he worked, his union, etc. Cultural tourism is based on people's natural curiosity for local values. As it is not possible to fully visit the Louvre in a single day, it is also impossible to know this huge cultural diversity of São Paulo metropolitan area in a single visit. Around half the World Cup international tourists will pass through the city. Some will stay for a few hours and others will stay days. It is important to impart in them the feeling that this time was short.

The real legacy left by the World Cup will be the development and the maturing of cultural tourism, for this is what will turn the investment in infrastructure into sustainable jobs. In order to stimulate entrepreneurs and governments to build a positive agenda that may become a catalyst of this tourism, this paper will: (i) detail the importance of IT services in a tourist typical day, (ii) declare the main challenges faced by London 2012 and (iii) stimulate the creation of reflections on the opportunities that must be exploited.

II. A Tourist Day

The app "wake up at the right time" in my tablet played music from my selection list and I woke up excited. The first thing I did was checking the app transit in order to evaluate possible delays. Afterwards, I checked the portal "friend of the tourist" to know whether there are any parties at night. How wonderful: it will be Italian night at the Bexiga neighborhood. I must get ready to having a great time! I programmed the tablet to the full exercise and low calories meal mode through the day. The app "friends" informed me that today it is teacher's day and I sent them all e-cards. The app "health" helped me choose my breakfast and sent to the hotel's hospitality application my choice, including timetable and

preferred table. I love having the first meal of the day with those perky Arabs.

I jumped into the shower and the app “ecobath” helped me program the bath’s duration and water temperature. After revigorating ten minutes the alarm sounded and the water was cut. The application “weather” helped me choose my clothes based on the temperature forecast for my quick trip to Campinas and for the party at the Bexiga neighborhood at night. In spite of the software’s lack of taste for colors and matching, it helps a lot in protecting against cold and rain. I hopped on a cab to Campo de Marte and had a quick flight to the technology center at the city of Campinas.

The tabled allowed me to confirm the reservation and informed me on the forecast departure and arrival time also helping me choose the best cab route from Paulista Avenue and Campo de Marte. I received information on the estimated length of the trip and its cost both in Reais and in Dollars. As soon as I entered the cab, the app synchronized my route with the vehicle’s computer, informing the driver on the chosen path. During the trip I read my e-mails and downloaded my messages in the social networks. Until I get to Campinas, I will be able to read the newspapers of the day as published in the app “news hub”.

I arrived at Campinas and waited only for a minute for the driver that would take me to the factory to arrive. I entered in connected mode and instantly sent all mu urgent business messages. I noticed that my assistant booked for tomorrow the 10 am time for a meeting with investors in an elegant mall at Paulista Avenue. The app automatically updated my integrated schedule with my dressing app and made some suggestions of clothing according to my script and the weather. After that meeting there was an informal gathering with IT specialized media. After this interview, my day was free to come and go to parties and games.

The meeting in Campinas was very interesting and counted with representatives from all South American branches. I received an urgent call from the office in the app “free easy calls” and Jeffrey explained with images and gestures that we must be very careful when renting a car to go through São Paulo. He reinforced several issues on traffic legislation, such as safety bells, drinking, crossing signs and cell phones. He also stressed the importance of periodically checking traffic reports because there are sudden and swift changes. He also highlighted the issue of using cell phones inside banks. He sent me an instructional video and programmed my schedule so that the app “Law” configured the tablet according to the environment.

The application “happy flight” updated the data on the situation of traffic and flight. Fortunately, there are no bad news or delays. The app “bagfast” released my luggage in few minutes and I was able to leave immediately. At São Paulo the driver received the news of an accident and recommended changing our route to Paulista Avenue. The GPS offered some interesting alternatives and I chose the one that seemed to be the most attractive. The app automatically updated the cab’s on board computer and we left for the evening party.

I arrived early at the party and my navigation system recommended me to go to a nice cafe nearby. I selected a good coffee shop in my list and the app found the best way on foot to the store, presenting me with directions as I walked. The app sounded an alarm every time I passed through a historical building that I might be interested in. The café is really nice and I felt so comfortable that I decided to read the excellent book "Governança dos serviços de TI na copa". I paid for my bill digitally. When I approached the Bexiga neighborhood I noticed the noise of the party and immediately headed for the entrance. It is true that São Paulo inhabitants are very friendly. The night was unforgettable. I took many pictures and the app published them immediately in my social network.

I went to sleep happy and while lying down I let my mind wander through the day. I realized that I am an island surround by many services with IT aggregated value. I kept wondering how it is possible that the currently reality of IT service management to make such a good work.

III. London 2012

The large number of visitors for the Olympic Games in London 2012 could have been a huge headache for the local business if not for the IT enabled transformation. This new IT was the great hope for London business for 2012. Several new IT technologies were used for the first time in the games. The local Olympic authorities worked together with the businesses so that the business continuity updated plan became a reality.

In spite of the fact of the major impact on the business was supposed to happen in the central region of London, there were other events in Weymouth, Cardiff and Glasgow, whose impact on local business was very high. Several businesses in those regions were equipped with technology for the temporary and permanent transformation that happened during the 2012 London Olympic Games. New management situations for streets, roads and communication infrastructure (both wired and wireless) happened and caused an impact on the business routine. An effort was made to prevent a blackout on the Internet, traffic, power grid, sewage, water and telephonic systems due to the huge amount of persons that would use those utilities for a short period.

An example of this problem was the fact that the businesses not directly connected to the games were affected because the delivered band was dynamically adjusted for the demand. This adjustment can be called a rationing. Service providers worked intensely with the information of their supply and demand systems in order to find a dynamic balance for the delivery of the services for their clients in a controlled, transparent and predictable way, which meant that the peak demand was flattened. The crisis that started in 2008 did not allow for the addition of capacity in all networks in order to service the forecast peak in all networks as needed. When we consider the large number of visitor that would stay a short time in the city, making a huge investment in capacity increase would cause a high risk of idleness later. The mobility of the new IT was highly used as a management enhancement tool.

The adjustment of network traffic speed for huge files and images demanded a lot of planning and using available

resources. As a result of the investment optimization strategy, businesses that traditionally had no concerns over commercial transactions processing worked together with their providers and planned the proposed activities during the games. Contracts and services were adjusted for the games time frame. There was a real risk of business loss due to lack of capacity that needed to be dealt with in order not to cause losses for the city's inhabitants and businessmen.

Practically every measure to manage the peak demand was enabled by IT service providers. In the case of companies that worked with videoconferences in corporate networks for their nomadic and remote workers, there was also a performance flattening. Communications band destination for mobile and dynamic games infrastructure was forecast, because headlines and news needed to become available in real time and with no high latency.

In other words, the continuity plan developed for business needed IT to contemplate the additional needs of mobile work to answer the games demand. The extended productive chained needed to be exercised so that the internal technology systems and external providers could establish planning processes for the demands to be fully understood and managed.

The British government developed several plans to help in the peak flattening and demand tension reduction adjustments. Several organizations agreed with the proposal of flexible work hours to diminish the need of traveling and deliveries to the London central area during the games time period. The flexibilization and the demand for travelling did not have an impact solely on the issue of traffic and journey time. There was also an adjustment on the distribution of resources such as power, water, telephony, teleconference and remote work. Performing certain tasks during night hours and at dawn allowed for a brave attack on the issue of peak demand.

It is obvious that not everybody understood the importance of preparing his small business for the changes caused by the games. Because of that, big companies worked through their extended value chain in order for all its members to be positioned and prepared about the availability of external services. It was not enough to have eight out of ten suppliers working with preventive planning while two of them stood idly by. All the influential members recognized that inconsistent plans would take them out of combat during the period where Olympic problems would be at their peak. It was of the utmost importance to understand clearly the motivations and implications so that in the H hour there would be no blackouts on the policies established for the Olympic Games.

The problems with supplying the value chain during the games caused a deep impact on the productivity of employers and employees alike. The restrictions and limitations for transportation could cause lack of merchandise in several businesses located in the areas affected by the Olympics. In other words, that meant that there was a real risk of decreased sales, profits and market share, which painted a picture of business risk premium reduction that was not desirable. Supply became such a high impact issue that was on the top of the agenda of all members of the productive chain.

The aggregate value service of the new Communication and Information Technology (CIT) was the enabling key that overcame the impacts causes on the network by the games demands. The plan success eliminated the possibility of exploitation of the security breaches of the productive chains. Good planning also favored the creation of a positive business environment. Frailties in this environment were identified and minimized in a consistent and robust way and as a consequence of those efforts a positive spiral was generated that allowed for the increased profitability and productivity of the supply chain that took companies of all sizes farther away from bankruptcy.

Since it is most likely that in Brazil similar limitations will arise during the great games and events, we need to look carefully at the British example and learn the good lessons of their early planning. Those who have already started to play the game have a clear competitive edge. The companies that finished the planning of their operations before the Olympics had a clear edge over their competitors. They acquired plans for Internet, energy, transportation and other infrastructure that addressed their forecast demand needs. The business profile that labors with individual and collective talent usually achieves success. These are companies that know how to measure reality and were realistic on the direct impact of the games on their business.

The marathon was a good example of direct impact, because streets and roads were closed affecting logistic. All the companies that finished their planning early identified that it would be very difficult (and in some cases impossible) for all their employees to arrive in time during the Olympic Games because of the restrictions and the fluctuating population. Full knowledge of this situation made the companies to develop a continuity plan to address this challenge.

Specific planning for the business continuity during the games involved all departments. They described the impact on them and how they thought the exceptional catastrophe should be handled. The involvement of the IT organization allowed for the identification of digital alternatives that could circumvent the problem of those that could not arrive at the office on time. Proposal validation in the real world turned many suggestions into viable solutions that were offered to authorities and service providers.

These companies moved all their critical corporate systems (electronic mail, applications for the management of their stores, sales, purchases, etc) outside their local office. They chose a resilient datacenter with secure cryptographed access. The employees received laptops and accounts in order to work at home or at a regional center. The internal and external communications structure was redefined for a social network structure in order to make sure that everybody was aware of the plans and actions. This set of companies understood clearly the warnings about the need to plan for the Olympics by the Local Olympic Authority and exploited the competitive advantage of going through the 2012 Olympic Games without any negative impact on their business.

The reorganization of the supply logistic through iTaaS (IT

as a Service) created a huge positive legacy for England. The big Brazilian cities suffocated by the increasing traffic slowness can use the opportunity given by the 2014 World Cup to increase urban mobility through the low cost investment on IT services.

IV. Twenty Challenges for 2014

As described in this text, there are several challenges for the IT sector during a mega event (World Cup and Olympics). Hence, using the 2012 London experience, we can list some of the main challenges that we will have to face in order to be able to provide quality services for the visitors and inhabitants of all cities involved in the 2014. These are some of them:

1. How to avoid income loss due to transactions that Will not be completed because of the difficulties of executing CIT systems?
2. How to maximize the time of CIT professionals?
3. How to avoid productivity loss of all employees due to the slow response of CIT systems?
4. In 2008 a video had about 200K size while in 2012 it has grown to 500K. How big will it be in 2014?
5. In 2008, Youtube has 21 million accesses. In London they amounted to 740 millions. How will Brazil solve the problem of exponential growth and of the redundancy of the double access to the US?
6. In the 2012 Olympics, video visualization amounted to 8,0 Petabytes. How big will they be in Brazil in 2014?
7. How to solve the data movement issue?
8. How to solve the traffic of the billions of visitors to the official page of the event?
9. How to handle the business intelligence?
10. Does the convergence of social networks with business intelligence create leveraged power?
11. How to work the direct costs of video saturation in the channels?
12. How to use network administration programs to limit the activity in a particular page?
13. What is the best contingency plan to keep the network active and working?
14. How to simulate billions of people accessing the official site?
15. How to protect the devices that are lost or stolen?
16. How to foil the big attempts at fraud?
17. How to avoid the propagation of false news?
18. How to dimension the capacity of the datacenter?
19. How to increase the power capacity offered in a specific region?
20. How to make maintenance during the Games?

The information systems for the 2012 London Olympic Games was the most complex work of technological organization ever performed to huge events. The scale of the challenge was gigantic. New IT services answered the specific needs of over four billion screens spread all around the world. Thousands of computers and servers connected in a safe network were used. Preparation consumed hundreds of thousands of work hours of the IT staff in tests and simulations. Everything indicated that the demands for 2014 will be much higher.

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