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Battle Report for battle 2

Uber vs Taxy

A space vectors story

The MilkyWay
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1   Introduction

One of the main concerns faced by any society who creates and sustains urbanism and colonization is traveling. Any shall seek for the best way to travel to the destination. Consequently, the definition of *best way* may not be as simple as it seems, since each individual appraises several factors in order to reach a decision. In general, different legal personalities offer variety of alternatives to the passengers and try to become the most popular in the market. Each of which may provide distinct services with unique advantages and inherent drawbacks. Accordingly, a dominant market position seems fairly impossible, since a passenger may consider a service better than its alternatives in the transport system based on assorted inferences that another daily traveler does not take into account. Therefore, whether or not is a service the best possible choice, is always a serious bone of contention.

In this report, we have summarized a debate between two suitable transport services for travelers and daily passengers in an assumptive time and location. Each group tried the best to convince as many people as possible to overcome the other. The teams achieved such convincing performance challenging one another in different aspects consisting of financial policies, marketing behavior, service providing, organization structure and so forth.

Loosely speaking, the debate concerns an imaginary situation of traveling by two possible solutions, which are MilkyWay and iTaxi. The first solution is derived from the business model designed by Uber company. As Uber is a pioneer in the sharing economy, it leads to a contradiction with the existing method disrupting and transforming the traditional market. As the form *Uberisation* is defined as a transition to an economic system, the agents involved are exchanging under-utilised capacity of existing assets while incurring only in low transaction costs. However, the Uberisation has been subject to many criticisms and compliments so far. The prevalent solution is provided by how traditional regulated taxi services operate considering all its merits and demerits, which is familiar for various societies for many years by now. Nevertheless, as mentioned before, it seems quite impossible for both sides that a system fully overcome another inducing a market dominance. Hence, there was a considerable exchange of thoughts at the end of the battle in comparison to the beginning, when the debate had the focus on success and failure of the aforementioned teams based on attracting audience opinion.

2   Scenario

The scenario takes place in 2100. Humans have started to colonize the Solar System. In 2030 Mars was the first planet to be colonized. Titan and Europa were colonized in 2070 and 2099 respectively. Therefore, there is a high demand for transportation since various destinations are now easy to reach. Having such a immense situation, The Interplanetary Committee was created as an authority with responsibility of managing transportation business in space. The

Interplanetary Committee regulated the iTaxi company to provide transportation services. iTaxi works in the same way as its equivalent on Earth. The iTaxi organization buys taxi licenses that distributes to their official employees, which in turn have to accomplish strict requirements. Journeys are performed using specific logoed space vectors, that can be demanded by customers and are able to transport them to the desired destination. Planets that are in the vicinity of Earth are now within easy reach of passengers using mentioned service and up until now iTaxi had a monopoly on the space transportation system. However, in the last year (2099) a new organization, called MilkyWay, has raised; proposing a new way of space travelling. The MilkyWay business model reflects the share economy approach, letting private people use their own vector to carry around customers. In contrast to iTaxi, within the MilkyWay everyone having a regular vector license is able to become an official MilkyWay driver, including a student in his free time. Comparing to iTaxi, as a result from having less constraints, MilkyWay services are cheaper than the one offered by the iTaxi. Seen as a disruptive competitor, iTaxi organization has invoked the Interplanetary Committee to regulate the opposing organization with the premise that their service does not comply with the law since their drivers don't have appropriate license. On the other hand, MilkyWay holds that the services they provide are demanded by their users, and that the Interplanetary Committee should let the two organizations, and the others subscribing to their model coexist; giving the customers free choice on which service they shall use.

Taxis	Uber
Public vectors	Private-owned vectors
Licensed by Interplanetary committee	Unlicensed (at Interplanetary committee)
Safety guarantee by license	No guaranteed safety
Fixed regulated prices	Dynamic prices (cheaper than taxis)
Fixed lines	Take the fastest routes
You get what is available	You can rate driver/ship
SOL: make Uber regulated	SOL: open the market

Table 1: Main characteristics of the two types of models.

2.1 Constraints

We decided to exclude from the scenario all the possible personal issues that Uber CEO had, governments involvement and other personal/political references. Moreover we accepted to match iTaxi regulations to the United States model and MilkyWay service with the one Uber provided in California at first.

Besides these constraints, we take into account not to make any direct references to both Uber and Taxi companies and not to consider death rates.

3   The MilkyWay Company

As stated by the scenario, humans have colonized most of the Solar System, transforming the cold and desert universe into a fascinating and attractive place of tourism, investments and opportunities. As soon as colonies set up, we observed a booming growth of the demand of transport service, due to the need of moving around the Solar System.

As a result of this changing environment, we decided last year to exploit these elements starting a new intergalactic transportation company, the *MilkWay*. Our mission is to propose to people a satisfying experience at the best price to travel around the Universe by means of private vectors and this is also our value proposition. Our customers just need a smartphone and our classy and interactive application to receive everything about our service and our drivers. The vision of MilkyWay is boosted by the idea of a truly free and open market, where we can connect people who need to travel with people who are interested in earning money by providing a transport service with their own vector.

Furthermore, since a lot of people needed a transportation service, we thought that previously choices were not enough to suit the needs of every traveler. Hence we introduced the MilkWay company, such that we may offer an alternative to what people used to take. Indeed, before the creation of MilkyWay, the only way of traveling across the human colonies was by means of a privately owned vector or by using the public iTaxi service. Therefore, those who didn't own a vector were forced to use the public transport. Currently, the iTaxi service holds a license granted by the Interplanetary Committee, who regulates them, and provides them exclusive lines, inducing a dominant position on the space transportation industry. Because of this, iTaxi does not offer competitive prices since they don't really have any incentive to make their service better and there is no real competition, forming a monopoly. As MilkyWay, we propose a new kind of service in which anyone that owns a private vector can become a driver for us and work on their own schedule. Our aim, as reported by our value proposition, is to provide a better transportation service at a much more competitive price. This will also force iTaxi to improve its existing service, since they will need to keep up with us. In addition to the transportation system, we provide some extra functionalities to make our service a better experience, as our intuitive mobile application, our rating system, and dynamic prices.

3.1   Our Business Model

At the core of our company reside our business model, which define the company keystones and what we want to offer to our customers. Here is a brief summary of it:

- minimalist interface between providers and their customers through the application

- rating system to check how providers (drivers) work

- cheap fares due to the kind of service (ride-sharing service)

- flexibility over the service and the real implementation (the transport)

- variety of means

- technology driven

- reduce the ownership due not to directly provide the service to the final customers

From the business model perspective, our target customer segment is diversified and is comprised by travelers (passengers) and cars owners (drivers) with different characteristics. As a passenger there are a lot of advantages using our service, some of them are: the application to access the system, advanced GPS, pervasive attribute so we can go anywhere, rating system, dynamic prices (cheaper than iTaxi), different kind of vectors, and flexibility since drivers can work anytime.

3.2 The Application and Rating System

Our application is the main interaction point between our service, our customers and our drivers. It has two main sides; the one that is used by passengers and the other one that is used by drivers. When passengers open the application, they see a map of their local area. From the map they can request to be carried across to some specific place on the map. Once the place is selected the passenger shall see how much it will cost to travel there from their current location and, in real time, the position of MilkyWay's drivers that are closer to him. If the passenger decides to continue with the journey then, when one of our drivers accepts the job, it will show to the passenger the driver information and how long it will take to pick that passenger up. Once the passenger is traveling with the driver the application will show their location on the map and the estimated time to arrive. At the end of the journey, the application will ask passenger to review and provide feedback about their driver, the vector and the overall travel experience. All these data will be sent to MilkyWay's servers and will affect the driver's rating. The payment for the journey is done directly through the application, in this way it is ensured a secure transaction for both the driver and the passenger.

The other side of the application is the one that drivers use and which shows when they are working. Also the drivers can see the map and when there is a passenger in their vicinity that requests a trip. If they are active, they will be asked if they want to take the job. The first who accepts will be the one that takes the customer. Drivers that exhibit a better rating will be notified

earlier than drivers with a lower rating. In this way there is a motivation to pursue a good rating and, in doing so, preserve a good service to the customer. Drivers with bad ratings will be contacted by MilkyWay to manage how they can improve their reviews. However, if a driver is under-performing in giving a better service, then that employee will be excluded from the platform. The driver side of the application also allows drivers to update their profile, check what payments they have received and their expected earnings.

Aside from the application, we think that the rating system is a key point to improve how people approach and use the service. Indeed, we introduced the rating system to prevent the degradation of our service and to avoid customers to get transported by drivers who are risky, rude or even nasty, since they are rated for each run such that they are excluded if their would provide a very low-level service . Although its importance, this is a unique feature that is not provided by anyone else in this market area.

3.3 Pricing System

Since there are sometimes when there are more drivers than passengers and others where it is the opposite situation, the MilkyWay system automatically calculates the best price for each journey at each given time, taking into account this supply and demand variation in both sights. As the adaptive system is looking for the best price it makes possible for our customer to pay less when they travel during periods in which there are a lot of drivers, such as the lunchtime, and also it makes possible to increase the drivers earnings when they work during more "uncommon" hours. This in part aids the system to have drivers available all day long. From the perspective of the passenger, in the worst case or most expensive case, the amount they will pay for the transportation service is only a bit lower as what they would have paid if they had used the iTaxi service (this given the premise that they're traveling on one of our standard vectors), but most of the time the fee is much cheaper.

3.4 Types of Vectors

As hinted above, the price also depends on the kind of vector the customer requests. We provide three main categories of vectors; standard class, premium class and deluxe class. The standard class is the cheapest and the most common. Vectors in this class are required to comply with a minimum of comfort and regulations. Moreover, they are also smaller than the other two classes. The premium kind is a bit bigger than the standard and only drivers with a minimum time of having a good rating can be part of this class. These vectors are also more comfortable and they provide refreshments. The last class of vectors is the deluxe one. These are big vectors with all the previously classes features, plus VIP internal and lots of other comforts. Drivers in this class first need to be part of the premium class for a minimum amount of time. To guarantee a minimum level of safety, before any vector can deployed, it must pass the same tests as a private vector is subject to. Furthermore, each time a driver changes

a vector they will be eligible to ask to be transferred to a different class. On the other hand, if a driver under-performs it will be downgraded to a lower class. In this way, we guarantee to provide the best service experience for what the customer paid.

3.5   Our Goal

Part of the value proposition of MilkyWay is connect people to get an efficient experience at the best price. The relationship between MilkyWay and the customers is based on the application as a point of interaction to retrieve reviews and all the travel and driver information as possible. Usually, the traditional channel method to reach our customers is through the website, also the social media, smartphones, campaigns and word of mouth. Mainly the revenue sources are come from venture capital investors, although the main stream is raised from the passengers and drivers charges.

Lastly, in order to bring this mentioned value to the people, the MilkyWay company asserts that the market must bring unrestricted competition between the different players to regulate the price, since a competitive price is the result of a fair competition. The MilkyWay company claims for an open market to let the competition begin.

4   The iTaxi Organization

The iTaxi (intergalaxy Transportation Agency for eXtraterrestrial Individuals) is a transport service provider that offers transport services across the Solar System, enabling customers to travel across the newly colonized planets; Mars, Titan and Europa. It is licensed and directly supervised by an external universal committee, the Interplanetary Committee. The Interplanetary Committee is responsible for the oversight of the operations of iTaxi and ensures requirements are strictly upheld by the organization. iTaxi offers a reliable transportation service which assures customers the best, safest and most reliable trips to their destinations while charging a predetermined fee based on the journey time and distance regardless of the traffic situation on the way. The organization also ensures day and night availability of rides in order to completely cater for the travel needs of customers. This allows them to travel at any time at their convenience.

Unlike other competitors, iTaxi offers direct employment to drivers which guarantees that social security payments and all service benefits are paid in accordance to employment regulations. In recruiting drivers, iTaxi maintains a high but reasonable set of requirements which drivers must satisfy in order to qualify to drive vectors as mandated by the Interplanetary committee. Background checks such as reviews of the driver's driver history report and penalty clearance are done in compliance with the requirements of the committee. Also, frequent training programs are organized for drivers to keep them abreast with current standards and best practices. Some of these training programs equip

them to properly relate with clients and assist them, especially the physically challenged. Again, iTaxi features propitious insurance policies that ensures insurance coverage for customers and drivers in case of accidents.

All vectors in operation are provided by the organization and the organization allows no privately owned vectors to operate under its authorization. Hence, drivers are not required to own their own vectors to be able to work with the organization. This also allows for a high level of uniformity in the vector fleet and ensures that all vehicles conform to basic but key requirements. iTaxi also boasts of an efficient internal management and maintenance system that sees to the daily maintenance of vehicles. In so doing, obsolete vectors in the system are replaced as quickly as possible to guarantee the safest travel conditions possible. The vectors are also equipped with functioning tracking devices that tracks the activities of the vectors while they are in operation.

The planetary Committee which oversees the operation of iTaxi also demands a constraint on the number of the licenses that can be given out to new drivers. The organization implicitly respects this decision being fully aware of the wisdom and benefits of it. This constraint prevents a very high number of iTaxi drivers and in so doing, decreases traffic congestion and reduces unnecessary and unhealthy competition among drivers. This also decreases pollution by reducing toxic emissions.

4.1 Business Model

iTaxi operates with a hierarchical business model [5]. At the apex of this hierarchy sits the interplanetary committee which is the highest supervisory and decision making body. Below it can be seen the management team of iTaxi.
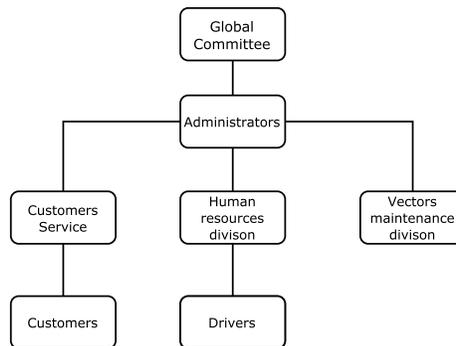

Figure 1: Hierarchy of the iTaxi organization.

This team sees to the day to day over all administration and oversight of all the internal affairs of iTaxi. After this, three wings; customer service, vector maintenance division and human resource division all lie parallel to each other at the same level.

The customers fall directly under the customer service division. The division ensures the maximum satisfaction of customers. Finally, the drivers fall directly under the human resource division and at the same level with the customers in the organigram of the company.
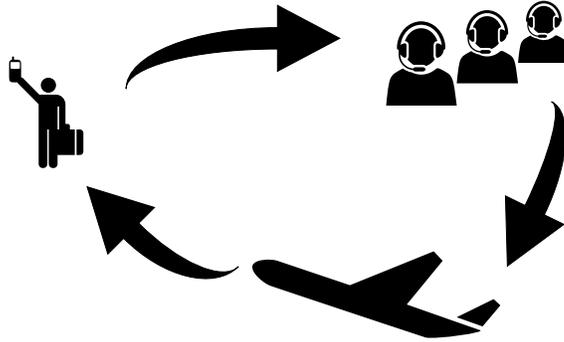

Figure 2: A big picture of the iTaxi business process

4.2   Confrontation

We started our discussion by presenting our strong points which included the fact that we are very transparent in the way we conduct our business with our customers. MilkyWay on the other hand is not transparent in their dealings with their customers, since they are not able to give a firm assurance and clear vision of the processes behind the services offered; coupled with the fact that not being regulated does not compel them to provide the services they are supposed to. For example, as emerged during the battle, it's possible for a customer of the MilkyWay to pay more than the accorded fee, since several factors considerably affect the stipulated price in the course of the journey. So there is strong uncertainty for the customer in the resulting amount of money they have to spend.

A question was also posed in the course of the battle as to how our organization will deal with a case of driver misconduct. We responded by saying, the driver in question would be investigated by the management of iTaxi through its human resource division. Based on the outcome of the investigation, required actions or sanctions would be meted out to the driver if found guilty. We also have psychological therapies for drivers experiencing personal and psychological issues.

We were also asked to give three features that make our organization unique; we believe three key features that make us unique are; the reliability, transparency and assurance we give our customers to ensure they reach their destinations in comfort and safety, considering the insurance packages we offer to patrons and drivers in case of accidents.

A major weakness of the MilkyWay organization has to do with their heavy

reliance on a mobile application that provides the sole avenue for customers to interact with MilkyWay system. This makes their system very vulnerable and if an error occurs, the whole system goes down. That is why we think that the modularization of our structure is one of our major strengths too. We think that regulations are essential especially when a company starts to grow really big and has a huge impact in the economy.

In closing, we stressed on the very salient points in our argument and made references to failed deregulation attempts in the past, particularly in the transport systems in some cities in the United States. We also drew the minds of people to the tremendous effects of the 2008 economic crunch which was a direct effect of deregulation gone wrong.

5   Reconciliation

After a lively discussion, the Interplanetary Committee has decreed that both iTaxi and MilkyWay will be capable of transporting persons. This with the condition that MilkyWay changes some of the ways in which it operates so that they may comply with actual laws and standards. These changes and their motivations are given below.

Historically, each MilkyWay driver was responsible for keeping their vector in order. They had their *own mechanics* and received minimal input from the MilkyWay company (only in the case that a customer reviewed their vector as bad quality). In this way, they are free to choose when and to who they want to go to check their vectors. Since this is really not a standardized procedure it is hard to prove if all of MilkyWay's vectors are actually safe or not. For this reason, the Interplanetary Committee decreed that now they will supervise the *maintenance process* of MilkyWay's vectors. They will be in charge of monitoring and defining this process and each driver will periodically have to go through it. In this way everyone can be sure that MilkyWay's vectors are as safe as they can be. This process will also apply to other new companies that want to use the same business model as MilkyWay.

Furthermore, in the past MilkyWay drivers could work any amount of hours they wanted. They could work just a couple of hours a day or they could do a straight 24-hour shift. In the case that drivers make very long shifts there is the possibility that they overwork themselves and may endanger their passengers or other entities on their way from one place to another. Seeing this fact and also the fact that this does not comply with the current labor laws, the Interplanetary Committee has decreed that a MilkyWay driver will not be able to work more than a specific amount of hours every day. This ensures that drivers don't overwork and makes an adjustment to the maximum number of drivers that are available at a given time.

Besides the limit on the number of hours that a driver can work each day, the Interplanetary Committee has also imposed a limit on the number of active drivers in a given area. This limit is currently quite high but was thought of for when the MilkyWay service becomes more popular and/or other new companies

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that want to use MilkyWays model are created. The issue rise when there are a lot of drivers around because the offer for transportation would be very high. If this offer does not have a matching demand then the price of transportation per se will quickly go down. This decrease will affect other transportation providers (like the iTaxi company), other market areas, and the quality of lives of the drivers, since they will earn less. Besides the economic and lifestyle changes an unbounded amount of drivers can produce, it will also highly impact the ecosystem and transportation infrastructure since there will be way more traffic, as a result of a lot of drivers idling searching for a passenger.

After that Interplanetary Committee solved the previous issue, it has been talked about the fact that MilkyWay does not require an insurance for its passengers (as opposed to iTaxi). In the end, it was decided that this was one of the ways in which MilkyWay's service was able to be cheaper. Therefore MilkyWay should let its drivers of standard and premium vectors to choose of having a passengers insurance or not, besides the basic one that cover the private vehicle. However, the insurance is mandatory for the deluxe class of vectors, such that is guarantee a high level of safety, even though it will cost more. Nevertheless all the insurances will be paid by drivers themselves.

As said above, all these regulations will not be applied only to MilkyWay, but also to any other new company that follows MilkyWay's business model, that is having drivers that with their own private vectors transport people around. This will ensure that all the market will be regulated and that the competition between different transportation companies is fair.

In the end MilkyWay company was able to enter the market and let a real competition began between different transport services, while iTaxi was able to demand regulations over new competitors in such a way that there were not advantages between parties.

6   Conclusions

The scenario exposed the two teams into analyzing several critical aspects related to business organization, from one side there is the concept of open innovation and its comparison with respect to close innovation. The MilkyWay in this sense represents the business that focuses on split its control over the resource it owns in favor of a more distributed management, letting the drivers use their own car and letting them managing the vehicles maintenance. Also their business is focused in breaking the barriers between customers and the business itself. It lets the customers chose for the driver they want, making easier to let the customer interface with the business process via an innovative application. The MilkyWay is also a typical example of the *Uberization process*, where the business give their customer a similar pre-paid system to use the services they provide. In this way the business collect capital before providing the service.

On this the iTaxi is on the opposite side, the business manages internally all assets (resources) aspects, from maintenance to driver recruiting, using a static cash collecting method where money are asked only when the service is

directly provided. The two sides are on the extremes, but the concept is clearly that there must be accomplished a trade off between collecting money before the service provisioning and give the customer a dependable service. The first it's very valuable from the point of view of the organization, since it allows to collect a large amount of capital that helps improving in small time the business and the service provided itself. The latter is also useful to give the customers a service they can depend on, which is safe and focuses on their needs and safety. As said before also the organizations of the two businesses are very different, the MilkyWay has a very distributed hierarchy from the point of view of the drivers. If everything is good drivers would be able not to see a direct supervisor in their career, since the only thing they have to do is interfacing with the application. The iTaxi on the other hand has a deeply structured hierarchy, where the drivers are the leaves and are directly supervised by central vehicle stations where they are supposed to return once finished their shifts.

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