

Racademy

EdTech Platform for Linking Tutors with Students

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Abstract

Learning diversity of activities both in terms of academic and free activities is an on-demand service, while there are several platforms which are active to teach such activities and courses to students by selling courses, the Racademy is an online EdTech platform to match students with tutors, but instead of selling courses which cannot be understood in different languages and the method of teaching might not be fitted to every student, the platform's aim is to facilitate the methods of learning with a fast, easy way for choosing an ideal, best match tutor and studying with students favored language through the best studying/learning method which can meet their needs.

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1 Introduction

There has been an increase in the demand for an online learning platform in the recent years, there are so many students with different capabilities in learning a subject and there are numerous conditions which may affect their learning such as the duration of the videos, the presence/non-presence classes, some may learn with the middle-class questions, and some get anxious when even an online class is live. There can be a learning platform for students around the world which can provide the facility for them wherever they are to learn and feel comfortable while learning.

Racademy platform provided the situation for various students all around the world it can benefit the students all around the world since no matter where they are they can have the accessibility to the platform for learning and the subjects are not limited, so they have the access to the variety of subjects. Another plus of the platform is that there is an availability for them to study their favored subject in English or any other languages that they want because in the platform numerous tutors with different languages can be registered.

Students can choose one option among these three to find their favored tutor, they can choose it directly or select the best matching tutor option, also there is another option which is more beneficial between previous two, in which the student can filter the tutor due to her/his needs. The process would be easy for everyone, students can send the request to their favored tutor and waiting for the response, and they will be notified about the acceptance/rejection by the notification as soon as the tutor accept or reject the

There is a support center which will ease the acceptance/rejection process for students, first students can send the request for their favored tutor, themselves, in the case of no response after two days, the support center will make a contact with a tutor, and they will update the tutor acceptance/rejection status right after. So, the waiting period of assigning the tutor would not be so long and unbearable for students. That is the positive point of the platform because it gives the students the opportunity to save their times and find another tutor right after. Tutors also have the allowance to reject or accept the students and they will be notified by the notification.

2 Processes

2.1 Customer

Means a person, who can be anyone with any background/occupation, when the account has been created in the platform by a customer (or a customer can log in into the account if he/she has one), then a list of tutors become available.

There are three ways for choosing the customer's ideal tutor:

- 1) Choosing directly from the list
- 2) Select the option to find best matching tutor
- 3) Find ideal tutor by perform filtering on the available tutor list

By selecting each of the above options the customer can decide to accept/reject the suggested tutor. If the tutor become rejected, the customer can go back to change his/her option.

After choosing the ideal tutor the customer must fill out request activities which is the form to write about the stuff that he/she wants to learn. Then the request to check the availability for selecting the chosen tutor, will be sent to the service partition of the platform. Result and request will be sent to the customer after the waiting period ends, then the customer can be notified whether the tutor accepted/rejected him/her. If the tutor result is positive, it can be accepted and the invoice can be paid by the customer, if the customer rejects it the tutor will be notified by the notification.

2.2 EdTech Platform

EdTech concludes databases and the events which can be triggered by the customer's requests, it can support the requests and handle the automatic jobs such as invoice generation, analyzing the customer's ideal tutor, system authentication and make the contact with the requested tutor. This platform contains two parts: Service: automatic jobs, modification and update the database, authentication, and Support: the manual tasks supporting will be done by employees such as make a call with tutor if the customer gets no response.

2.2.1 Service

Authentication performs in this lane and handling the ideal tutor request which was requested by customer with the “best finding tutor” option and it sends the ideal tutor list to the customer the request for checking the availability of requested tutor and contacting with him/her is performed and in the case of no response from the tutor, request will be sent to support center for making a call with the tutor. In the case of approval, calculated cost and the co. tact details will be sent to the customer as a digital invoice.

2.2.2 Support

In the case of no response from the tutor, support center will make a contact and after that they will update the tutor response in the platform, basically the process will be done by the support center if the tutor does not respond to the request after two days.

2.3 Tutor

The notification will be sent to the tutor if the customer sends the request, response to the notification to the request and setting the cost or request rejection by specifying the rejection reason will be performed. In case of two days delay of a tutor response, support center will make a call with the tutor and if they get no response again, the request will be cancelled, and cancelled notification will be sent to support center. There are digital documents which can be transferred by activities to various parts.

3 Business Process Flow

3.1 BPMN Diagram

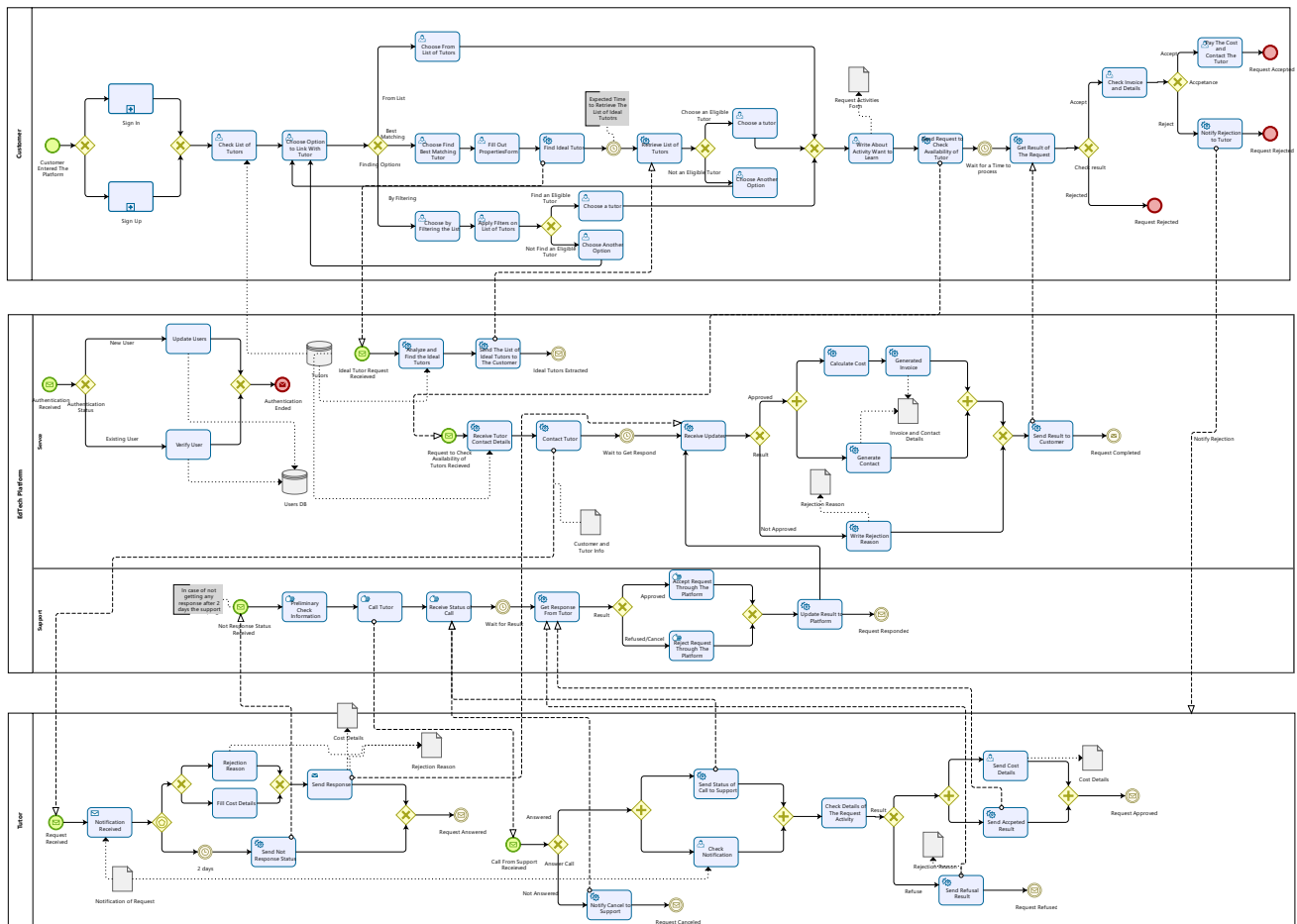
The Business Process Model and Notation also known as BPMN diagram drew using Bizagi Modeler and depict in their following parts.

3.1.1 Complete BPMN Diagram

The complete BPMN diagram of the business processes has drawn which consists of 3 pools namely, customer, EdTech platform, and tutor, it contains the annotations and relevant lanes to show the flow.

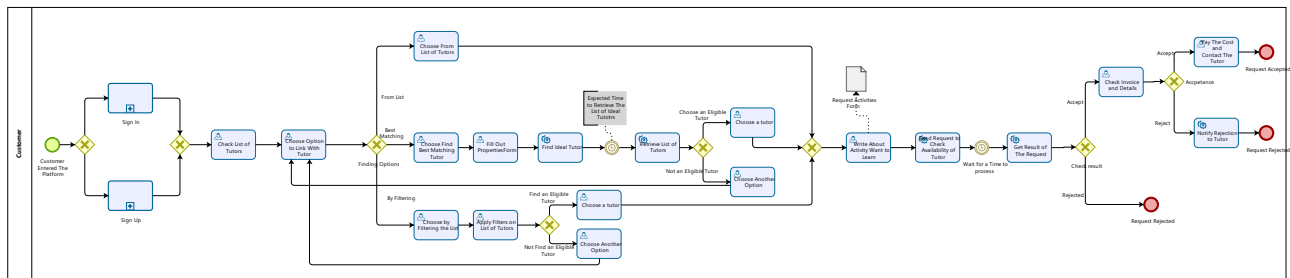
The complete BPMN diagram depicts in figure 1 in the beginning of the next page:

Figure 1. Complete BPMN Diagram



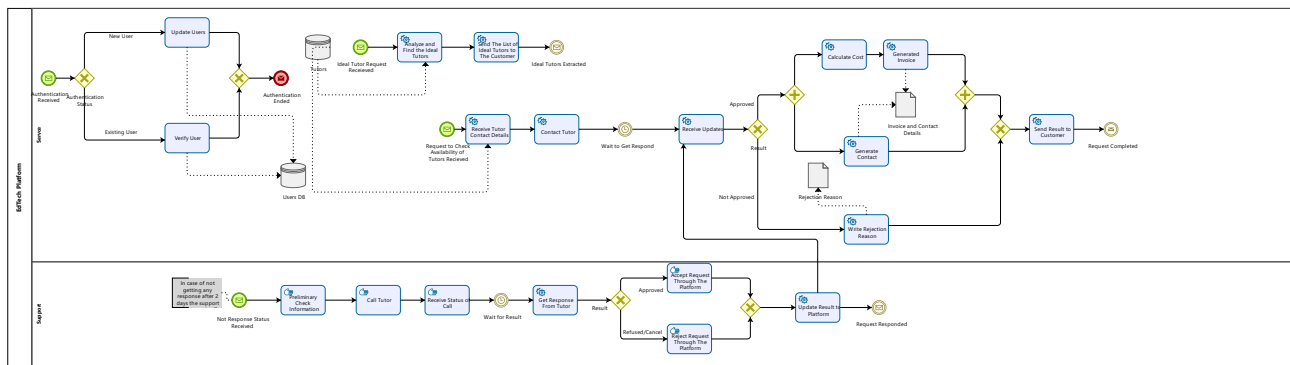
3.1.2 Customer

Figure 2. Customer BPMN Diagram



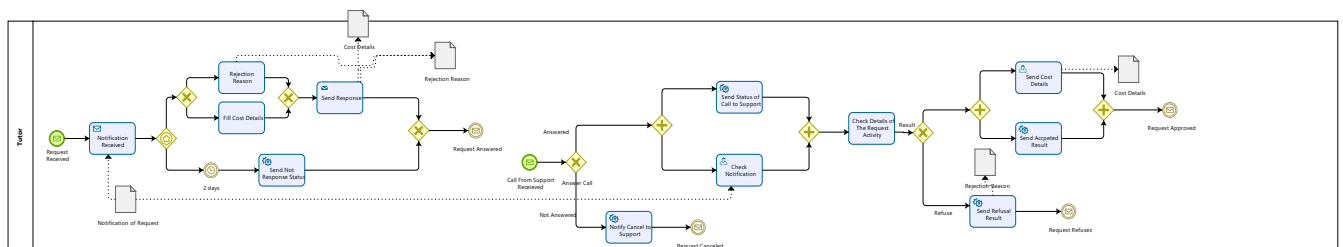
3.1.3 EdTech Platform

Figure 3. EdTech Platform BPMN Diagram



3.1.4 Tutor

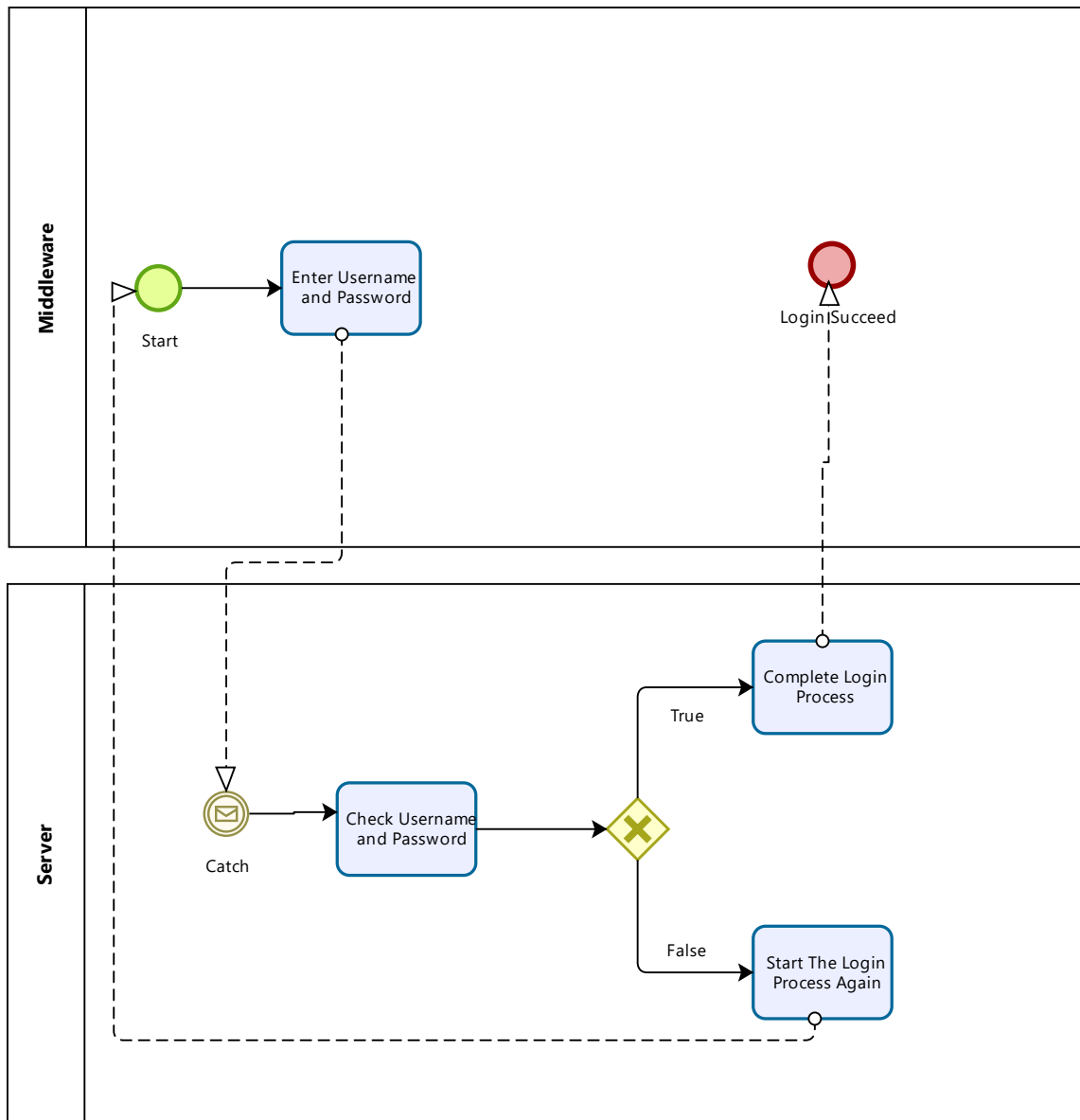
Figure 4. Tutor BPMN Diagram



3.2 Sub-processes

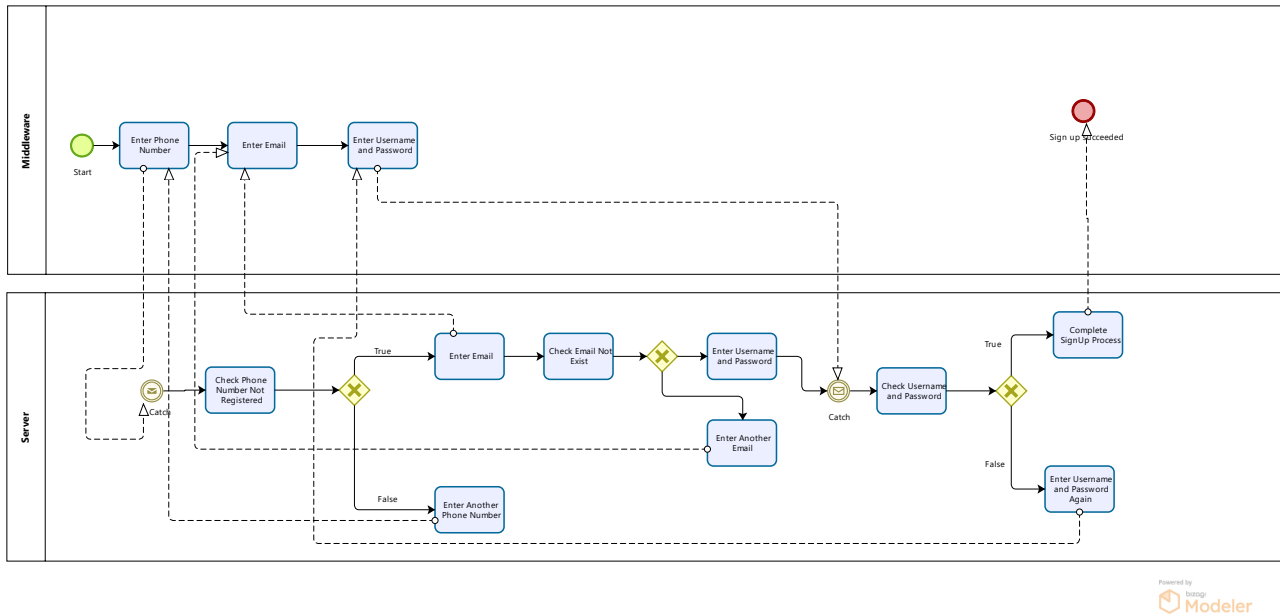
3.2.1 Sign In

Figure 5. Sign In Sub-Process BPMN



3.2.2 Sign Up

Figure 6. Sign Up Sub-Process BPMN



4 Value Model

By value model we can depict the perspective view from value, the value model illustrates the actors and their value exchange between their interactions.

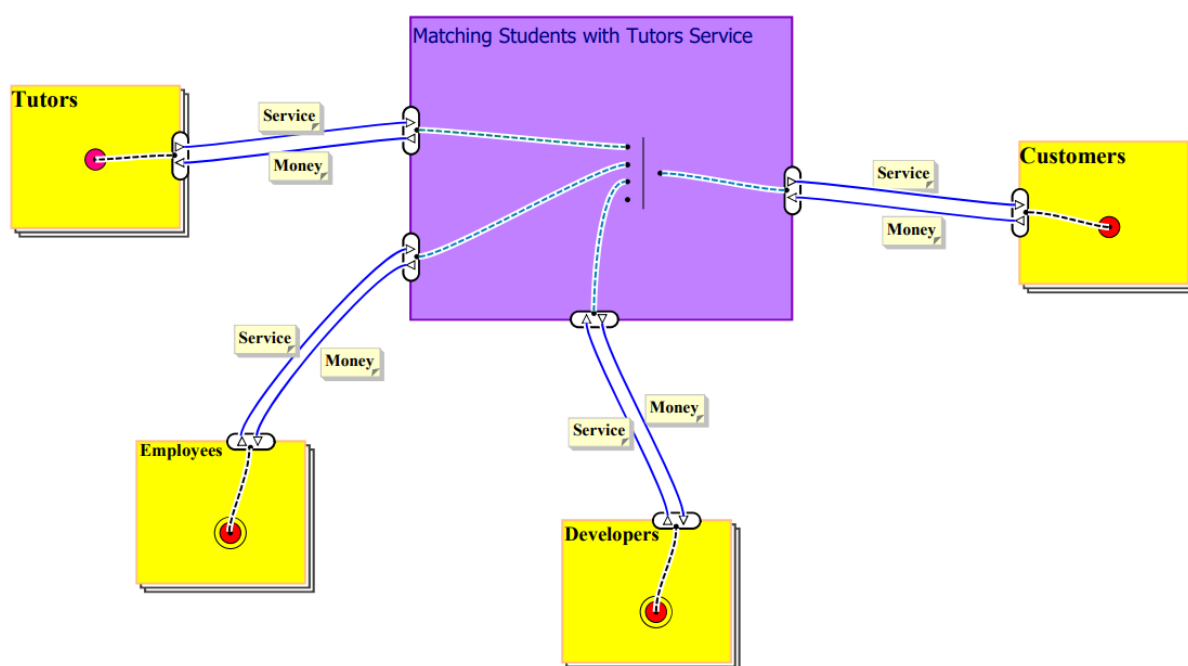
4.1 Actors

There are 5 actors who are shown in the model who are the **Customer**, who would like to link with a tutor by paying the cost and receive the eligible tutor as a service, **tutors** who have been registered through the web application platform and completed their profiles and teach students a course or an activity as a service, **employees** and **developers** contact supports and develop the application of the EdTech platform, respectively and the **matching student with tutor** platform itself acts as an intermediary in the model.

4.2 Diagram

The e3-Value model has been drawn, depicts the actors and the value objects exchange between them by value transfer in the figure 7 bellow:

Figure 7. E3-Value Model Diagram



5. Measurement Factors

5.1 Critical Success Factors (CSF)

The Critical Success Factors also known as CSF are factors that are related to the company or organization's strategies without any dependencies. There are indicators for opportunities, activities or conditions required to achieve an objective within a service.

- **Number of active tutors**
 - The more active tutors, more variety of choosing by methods and languages
- **Diversity of tutor's skills**
 - Increase diversity of tutor to cover more activity areas
- **Number of support's employees**
 - More support's employees, perform better in problems related to contact tutor
- **Variety of payment service providers**
 - By increasing the number of payment services, would be more convenient for users
- **Cover different teaching languages**
 - By covering more spoken languages, more chances to be known internationally
- **Response time from tutor**
 - By decreasing the response time from tutors, the greater efficiency achieves

5.2 Key Goal Indicators (KGI)

Organizations and projects represent quantitative indicators of the goals to be achieved. It is not an abstract goal, but it is a concrete (numerically defined) definition of which period, which index, what level and what level it regards as goal attainment. It may also refer to the indicator itself. It is often used in conjunction with KPI. For simplicity, KGI is the final goal. We can target specific numbers and clarify the purpose of the site. Also, KGI will narrow down to one of the most important ones.

- **Increase in new users**
 - Getting more users is a key to the business.
- **Increase in tutors**
 - Another key element is the increase in the number of tutors.
- **Cover availability of languages**
 - It is necessary to cover most languages.
- **Cover various areas**
 - It is necessary to cover most of well-known areas by tutors

5.3 Key Performance Indicators (KPI)

Key Performance Indicators (KPIs) are an index of the performance used to measure the results achieved by the organization. In our case we can define in practice (Table 1):

Table 1. KPIs in Practice

KPI	Criteria of Evaluation	Outcome
New user joining rate $Q = (\text{Number of new users in a specific time} / \text{Total num of users}) \%$	$Q < 0.01\%$ $0.01\% < Q < 0.05\%$ $Q > 0.05\%$	Negative Positive Overflow
Time of response $T = \text{Response time}$	$T < 2$ $T > 2$	Positive Negative
Coverability of various areas $R = (\text{Number of tutors} / \text{sums of available areas}) \%$	$R > 110$ $R < 110$	Positive Negative
Coverability of different languages $L = (\text{Number of tutor's languages} / \text{number of spoken languages})$	$L > 10$ $L < 10$	Positive Negative
New requests per day $S = \text{Number of requests per day}$	$S > 5$ $S < 5$	Positive Negative

6 Conclusion

The business and the service are modeled and by that we could see how everything is working together and then to identify the important factors needed to improve the system and bring higher revenue to the business. Knowing the critical success factors required to achieve an objective within a service. Also, KPI, quantitative indicators of the goals helped us to know how the actual growth action plan works in numbers. Value model just gives a quick glance to what have been exchanged between different actors of the process.