CALEB: Microworld of the Christian Church's Membership Dynamics

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ABSTRACT

This paper propose a software named Caleb. Caleb is a microworld based on system dynamics, that let to study the dynamics of the membership in a Christian Church located in Bucaramanga, Colombia. The Church has been development in the course of fifteen years, after having begun of zero, in the present time has 3500 members. In this course the church has been losed 6000 members. The problem is explained using system dynamics. The elements that growth and decline of the members are integrated in a system dynamics model. To finished, the paper present several ideas of the manager of the Church, about how use the software to re think activities to develop his organization.

INTRODUCTION

It has always been considered not very common that a topic as this is treated and studied as a very independent organization; since always it has been believed to dogmatic way that in their entirety the behavior of people that conform an organization of religious type tour around the faith and the doctrine. And also it is believed that the person in charge of this organization is the only one responsible for maintaining or in the best in the cases to increase the size of the membership from the group to which shepherds; perhaps influenced by the good acting that has as speaker to transmit for divine inspiration, the message that arrives to each one of the lives that were given him by God to shepherd.

There is an uneasiness that is manifested from a point not yet well-known (which will try to be, to be measured and to be detailed for their effective treatment), until a called point the desertion". Perhaps forgets the human nature that these organizations have of the divine thing, and of their administrative paper of feeling human around the faith. The church like such through this new study it will try to check that although their

origins are spiritual, themselves concerns him to organize to God and that at the group of people to direct must be observed like an organization that it still owes him, by divine mandate, to concern the same man to direct, together with all their elements, under the kindness that offers the dynamics of systems to see the variables that it can affect the growth of these same ones in the use of their strategies to sustain the life and reason of the company of God in feeling of each believer.

THEORETICAL AND INVESTIGATIVE BASE

The church

Their denomination is: "Iglesia Cristiana Pentecostés del movimiento misionero mundial de "la Calle 43", Bucaramanga - Colombia". Their doctrinal base is composed by the sacred writings (The contained Bible since the book of the Genesis of the old Testament until the book of the Apocalypse of the New Testament), as only source of divine truth that was accepted as such, from the beginning of the times; Institutionalized and defended later by Martin Lutero (the " Reformer ") with their 95 theses that he exposed in front of the Catholic church and that later resulted him in their excommunication of the same one. It is according to this historical context that is formed the Protestant Movement of whose nature is laid the foundation doctrinally the church in study, under a philosophy of principles Christian that promulgate for its maintenance and survival that that biblically the apostle Pablo scores like foundation of life: " And the same one constituted some apostles; to other prophets; and to other evangelists; to other, shepherds and teachers in order to perfect the saints for the work of the ministry for the construction of Christ's body until we all arrive to the unit of the Faith and of the Knowledge of the Son of God, to a perfect male, to the measure of the stature of Christ's fullness"

The mission of the church is to Win souls for Christ from the different work fields in that he/she moves for such an end (Television, Radio, Literature, personal Evangelización, etc..) and its vision evangelística is that this doctrine of love and salvation is known in all the corners of the earth. I testify of it is it the work that has provided effect approximately in some 50 members of the same one in the their fifteen year-old course, so that today in day they are the founders of more churches that at the moment work at National and International level.

Systems Dynamics

Systems Dynamics is a methodology that let us build models of the general proporsal, under systems aproach focus. For our case,each user set the inicial values and conditions of the diferent scenarios for the simulation of the model. The model represents the dinamic of membership,
The grow and the declive of the diferents types of members. The model's design will be proposal of the organization in several sessions of organizational learning. The most important member for the membership process, think abaut their mental models and building the causal loop diagram of the phenomemon. This activies let us understand the problem, in terms of causal loops and simulation process.

Microworld

Based on concept developed by Marvin Minsky and Seymour Papert of Microworld (the users, with the model, can making representations of an immediate reality on a topic that will be refined or polished by the apprentice, beginning with a starting point that allows him to create their own extensions") we propose to develop a software that manages this type of organizational and social problem. For the case of the church, the reflection of what is made in this respect he/she will give the identification of variables and points of leverage for their own solutions.


Organizational Learning

To guarantee a sustainable development and a deep change in the organization that carry out the main objective of this project that it is to control the growth of the membership of the church, we use the tools is made that offers the system thinking to be able to see the problem in (causal loop way) a recurrent way, understanding that to generate strategies, we will be making it to a non lineal process {Peter Senge says about this concept that in its book The dance of the change describes it in the following way:} To understand the restrictive processes and principles like the compensatory reaction is very different of having a manual of how to make the things, in spite of that which managers look for answers of this type exactly and many manager's manegement book pretend to give then.

The organizational learning's objet will be that the learner understands the relation either organizational sostanability and a causal loop system view of the organization.
About this and the looker wants explainig and making know ledge about reality, Maturana says that: it's very important about to achieve the sustanaibility, by way of the learning.

In the system's research of the human activity, (about social systems, Checkland says that it has people that know about their group and their emotions) are conservative systems. In according to, the human social systems can change only than their members have experiences that wake up changes into corporality that results in go out of their convertitionals constitutives nets.

BEHAVIOR OF THE MEMBERSHIP OF THE CHURCH
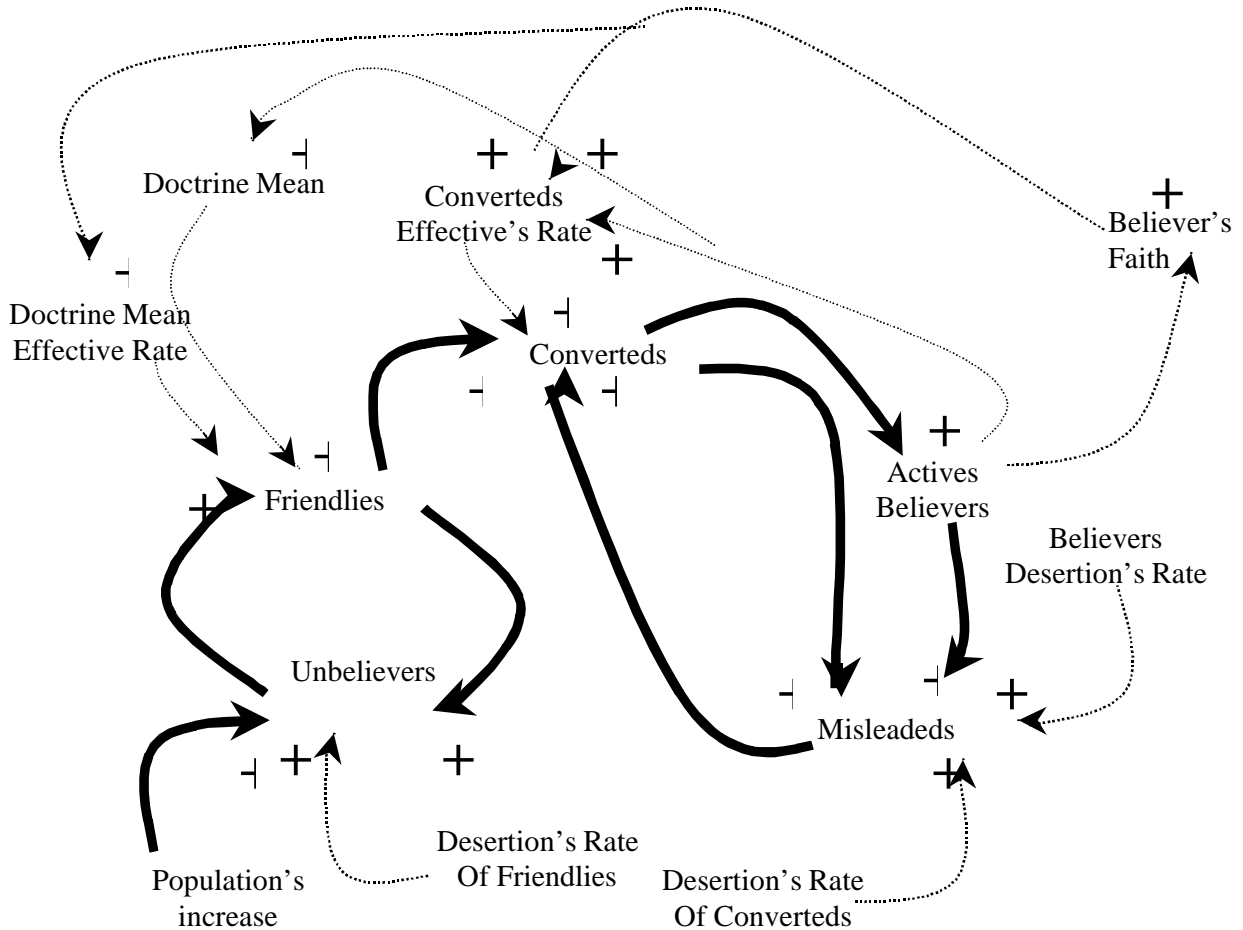
The previous causal loop diagram of the phenomenon of the grow and the decline of the membership in general terms try like main objetive to increase the number of believers actives for to provoke a decrease of the unbelievers's population and of misleadeds's population. While the unbelievers's population increase, then the persons's number that under a process of peach the lord's words they accept to listen the message and to begin to assist at the church, the friendlies's number increase. This quantity depend or it's affected by the effective's rate doctrine mean. Similary, the friendlies can to desert and that they come back to be unbelievers and this behavior is influenced by desertion's rate of friendlies on the friendlies. At the same time, they too, depend of the effective's rate conversion in a process called The conversion where they are indoctrinated in a time's period. While the converteds's population increase, then the actives believers's number that under a process of doctrinal training they accept be actives beleievers and this way the number is increased that similary they will affect the beliver's faith, so that it

increase the diferents rates that it can carry out the objetive of the grow of the membership.

Each one of the different processes that the person accept to make, when he/she want to be actives believers it's affected by frindlies, converteds and actives believer desertion's rates decreasing the population of these variables and increasing the misleadeds and unbelievers who could come back to be friendlies or converteds and more late to be actives believers.

Forrester's diagram
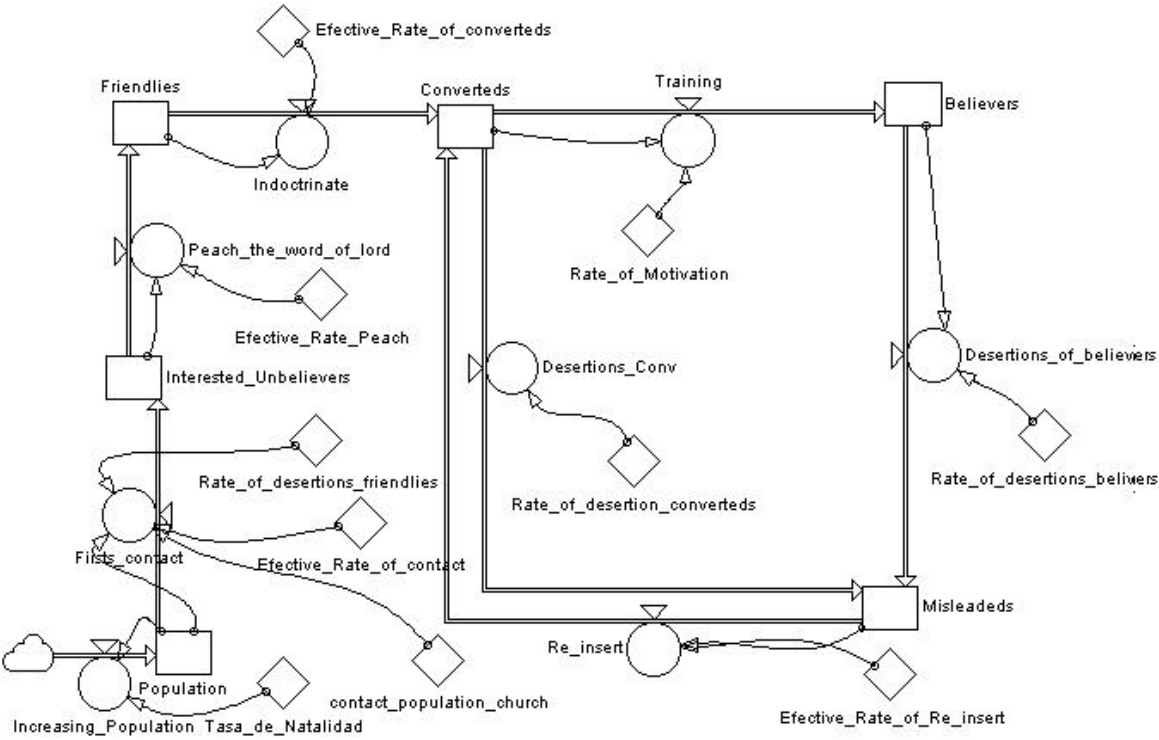
In accord with the Forrester's diagram the following simulation's graphical with the rates that are affecting the diferents flows. Whose characteristics of quality and quantity are in research to be measured and to describe the reality of membership's phenomenon.

Simulation's graphical

MONTH
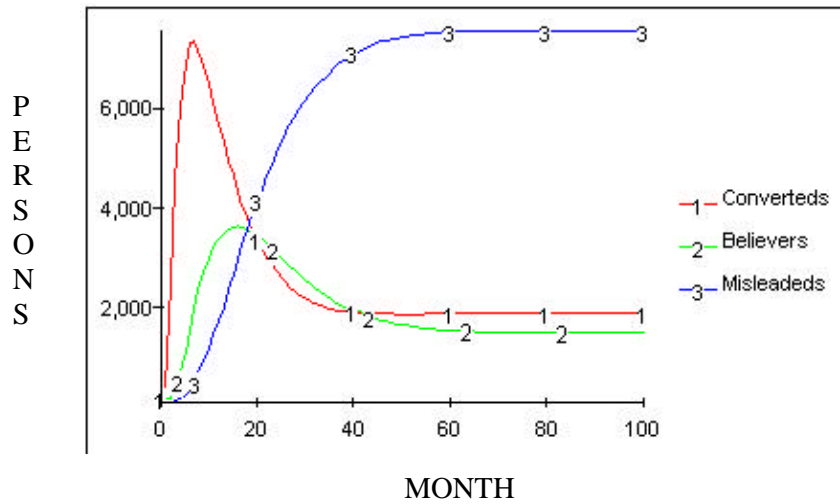
We can say that the trayectories of the membership's dynamics are very criticals. The best way of the dynamics of the membership is one that the converteds tends to grow and go to the stability state, and the misleadeds tends to decline.

CONCLUSIONS

- It's necessary that the members's group interested in the church's membership, get to have a consensus that it can them to show the reality about its behavior and they can to have too Organizational Learning.
- CALEB don't offer problem's solutions to the organization, CALEB will create reflection's spaces that can to help to this members's set (supporteds in theirs owns experiences and in the microworld's operation) to speak about possibles solutions for organizational sostanability and the membership's grow.
- The developed knowledge with this work will be used like support's tool to plan to future the way in that the organization (the church) could to have a positive change.

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