What Determines Association Success?
Insights from modeling the evolution of an association
Randy Park, Decision Advancement

Abstract: This white paper is an examination of the importance of member satisfaction to the success of an association or club. Although it may seem obvious that member satisfaction is an important metric to consider when analyzing what will make an association successful, our model reveals that relatively small differences in member satisfaction can have a huge effect on membership numbers. This is because member satisfaction affects so many other parameters that influence Association success.

Introduction:

This system dynamics model looks at the evolution of member number growth or decline. It incorporates parameters such as association visibility, attractiveness of the association to potential members, promotion by members, and others.

It examines the critical flow from potential members to members, and the reverse (the one that is often ignored), members leaving and going back to being potential members.

The key determinant of the flow of members is member satisfaction. At one level that is an obvious statement; but the model also captures the other parameters affected by member satisfaction. For example, if member satisfaction drops, not only are people less likely to renew membership; they are also less likely to promote their association, to be enthusiastic with guests, to encourage others to join, and so on.

The message in this white paper is that not only is member satisfaction important, but that relatively small differences in member satisfaction can have a huge effect on membership numbers. This is because member satisfaction affects so many other

parameters that influence Association success.

This white paper uses a system dynamics model which we developed to examine the effect of member satisfaction on membership numbers. System dynamics is a powerful analysis tool to examine the behavior of complex systems, systems that have multiple variables affecting their outcome. System dynamics also permits the calculation of alternative scenarios by varying different parameters. Although it may be tempting to conclude this allows the prediction of the future, in fact the greatest power of system dynamics is the identification of the current situation and the effects of feedback loops. In doing so, the assumptions and beliefs of decision makers are revealed.

This model describes a situation where the association or club can have an unlimited number of members. It is not directly applicable to situations where membership must be limited because of facility limitations as is the case for many sporting clubs, though certainly some of the lessons will apply.

Note that many of the lessons also apply to donors to a charity. We intend to create a version of the model designed to look in detail

at the dynamics between charities and their donors.

The Core of the Model:

A core concept in system dynamics is the idea of *stocks* and *flows*. A stock is an accumulation of a quantity. The quantity might be a physical measure such as number of members or items in inventory. Or it might describe a representation such as a bank balance. A flow describes the filling or emptying of a stock such as shipments from inventory or deposits and withdrawals from a bank balance.

In the diagrams a stock is shown as a rectangle to suggest a container which holds the stock. The flows are represented by pipes (heavy lines) and valves (the double triangles.)

An analogy for stocks and flows is a bathtub which holds the stock of water where the flow is controlled by the taps and the drains.

Figure 1

Figure 1 shows the stocks and flows between *members* and *potential members* of the Association. Starting from the far left the *cloud* represents the general population. (In System Dynamics a cloud represents a large source or sink of a quantity. Clouds are outside the boundary of the model and for the purpose of the model assumed to have limitless capacity.) Some of those people from the general population will become potential members, because they enter the professional field, or in the case of a sports club because they take up the sport. They may become members, or they may exit from the potential member stock (by retiring or quitting the

sport) without becoming members. Members can only come from one place; from potential members. However they may leave in two directions. If they remain in the profession, or in the sport, but leave the association or club they go back to being potential members. On the other hand if they retire they exit into the cloud on the right hand side.

The stocks in this model are measured in numbers of people, and the flows are measured in members per month or members per year.

Results from the Model:

A more detailed explanation of the model is provided in the Appendix. First, though, we will look at some of the conclusions that result from running the model with typical parameters.

As mentioned at the beginning of this paper, the membership numbers of the association are strongly dependent on member satisfaction. A useful starting point is to begin with a member satisfaction of 85%. In the absence of external factors that might change member satisfaction, this number will be maintained over time as shown in Figure 2.
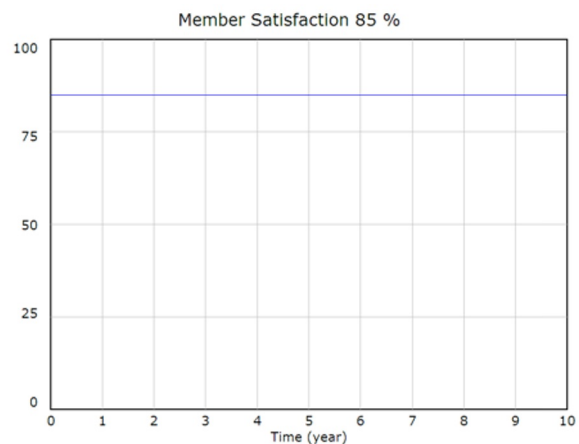

Figure 2

In this model, if the initial membership number is 1500 out of a potential pool of 10,000 members, an 85% member satisfaction

will result in a growth in membership over time such that after ten years there will be almost 3000 members as shown in Figure 3.
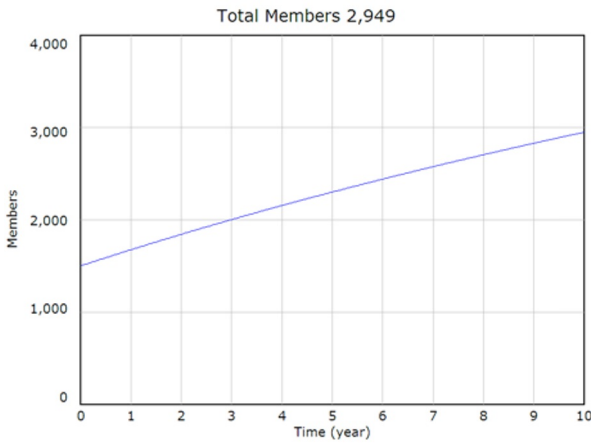
Total Members 2,949

Figure 3

This scenario will be used as a base case for the analysis.

If member satisfaction starts at 80%, the overall behavior is quite similar but the association doesn't reach quite as many members as shown in Figure 4 and Figure 5.
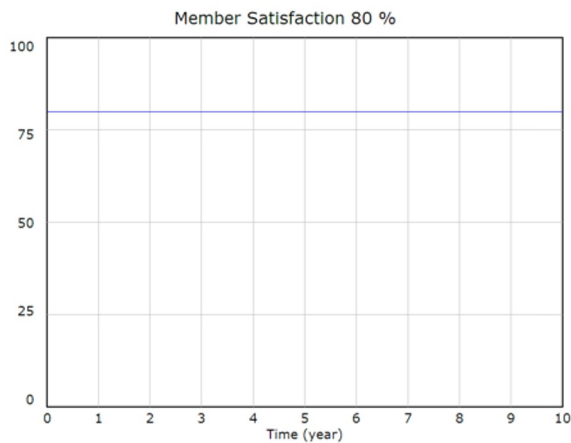
Member Satisfaction 80 %

Figure 4

For 80%, as for 85%, the member satisfaction remains constant over the ten years monitored. The net number of members grows slightly more slowly as people are slightly less likely
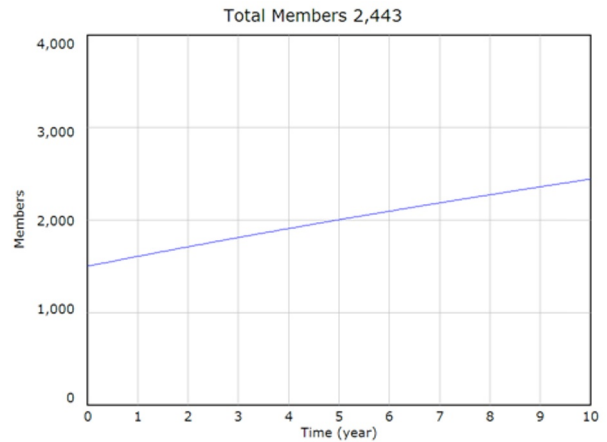
Total Members 2,443

Figure 5

to renew or talk favorably to others about their association.

If the member satisfaction starts at 75%, however, there is a significant difference in ultimate association member numbers.

In the case of 75% member satisfaction some of the feedback loops start to have a significant effect, resulting in a steady decline of member satisfaction. This reflects the fact that at lower levels of member satisfaction, people are more affected by the general atmosphere of the association. As other members leave, member dissatisfaction grows. And as members become "grumpier" as their own satisfaction decreases, it affects others' satisfaction.
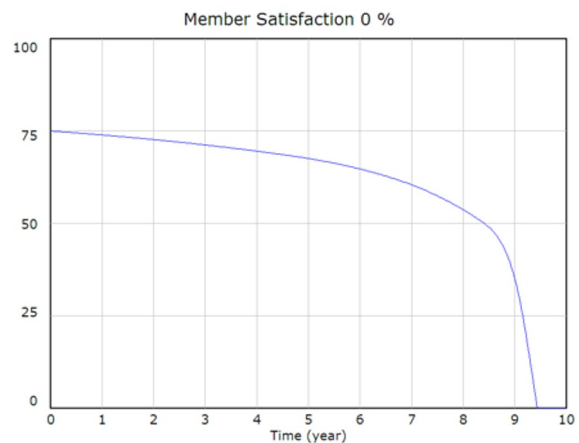
Member Satisfaction 0 %

Figure 6

At an initial member satisfaction of 75% the association declines, and as it declines, member satisfaction declines even more in a vicious cycle. Membership also drops since members are less likely to talk to potential members about the association; show less enthusiasm to guests; and generally lower the amount they promote the association.
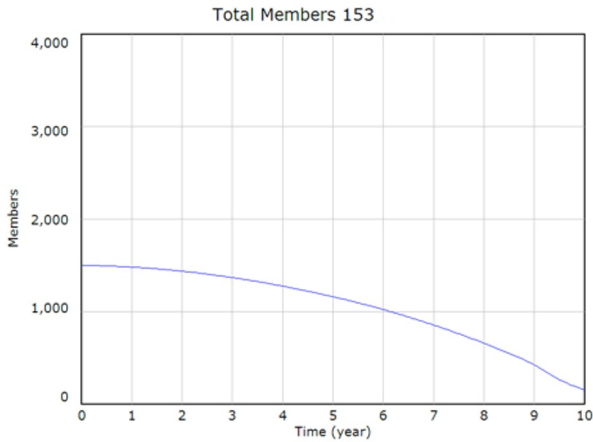

Figure 7

The key lesson from the model is that relatively small changes in member satisfaction - changes that might be noticed but dismissed as insignificant - can result in drastic changes in member numbers.

Resilience:

There are some other plausible scenarios that are worth examining. For many different reasons, an association may experience a couple of "bad years." An unpopular executive or a downturn in the economy may lower member satisfaction (or members' perceived value) for a period of time. It is instructive to look at what the model reveals about a two year drop in member satisfaction.

Figure 8 shows a drop in member satisfaction of 12% for two years. During this period, as shown in Figure 9, member numbers drop before recovering as member satisfaction jumps back up - though not to the initial 85%.
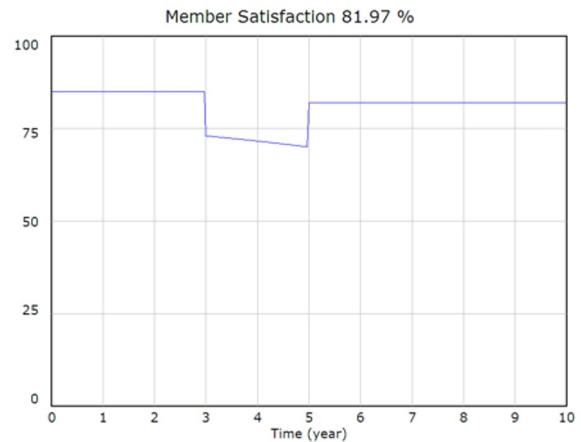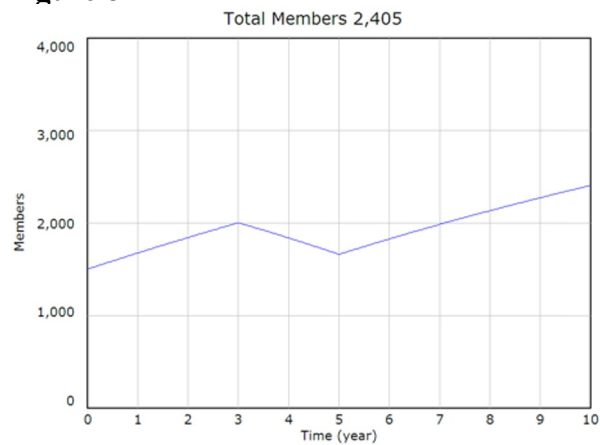

Figure 8

Figure 9

Still, the association recovers fairly well from this setback. The relatively high initial member satisfaction provides a resiliency for the association; it can withstand a couple of tough years and still recover.
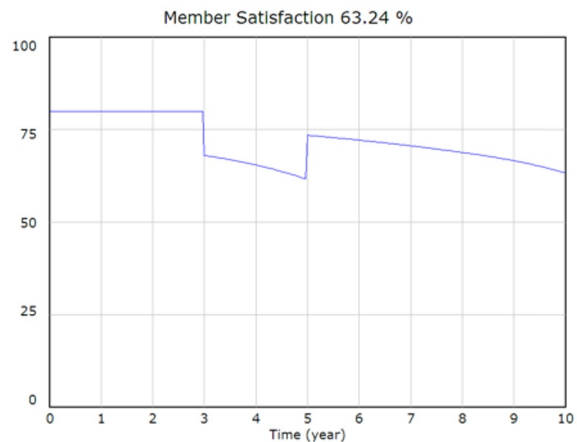

Figure 10

Total Members 950

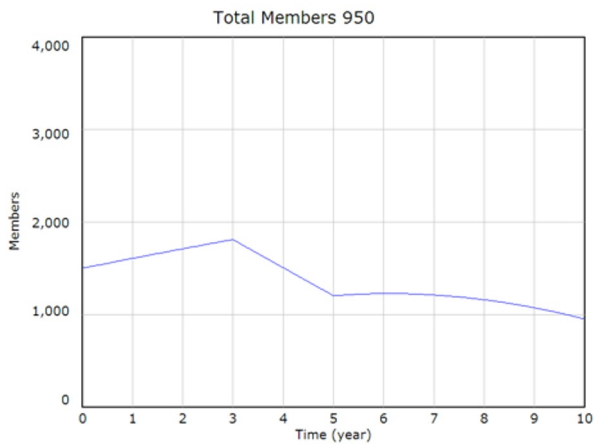Figure 11

Member Satisfaction 0 %

Figure 13

If the initial member satisfaction is 80%, there is not the same ability to recover from a setback. Figure 10 shows member satisfaction starting at 80% and continually declining after the two year temporary drop. Figure 11 shows the resulting membership performance.

As shown in these last two scenarios, a couple of bad years starting at 85% is survivable, but may not be at 80%.
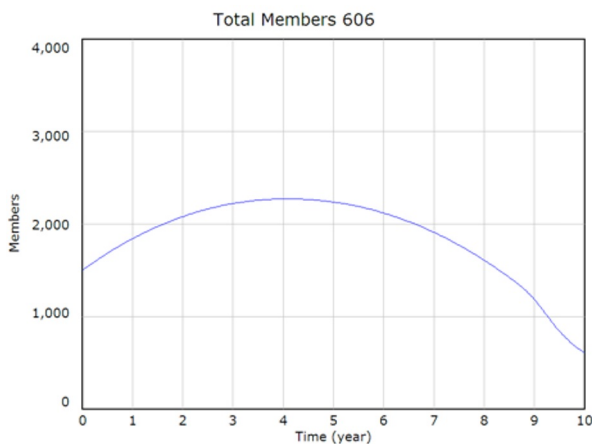
Total Members 606

Figure 12

In the last scenario shown in Figure 12 and Figure 13, the association puts forward a significant marketing and promotion effort to raise visibility and succeeds in converting more potential members into members. Membership actually grows for several years. But because member satisfaction begins at 75%, eventually membership declines.
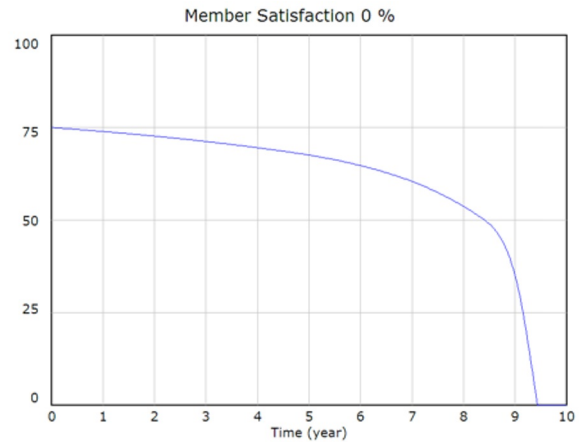
Conclusions:

The model demonstrates that small changes in member satisfaction can have a large effect on member numbers and the viability of the association. From 85% to 80% leaves the association vulnerable; from 80% to 75% results in a steep decline.

Note that even if people became aware of a 5% drop in member satisfaction, they might miss the significance of this small change.

Also important is the delay that commonly occurs because dissatisfied people might not quit right away, or even simply because it takes a year for membership renewal to come around. Thus the association can decline significantly before the problem is noticed.

The lessons for associations include:

• create a mechanism to monitor your members' satisfaction

• pay attention to seemingly small changes in your members' satisfaction

• be proactive in asking your members if they are satisfied

• be sure you are placing enough emphasis on satisfying your current members

• don't just rely on total member numbers as a measure of your association's success

Appendix:

Details of the System Dynamics Model

This section explains some of the working behind the model for association membership.
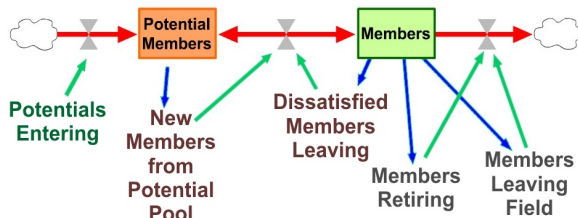

Figure 14

The green arrows in Figure 14 show some of the parameters that affect the flows of people. For example, there are members who are retiring or leaving the field or the sport. Note that there are also blue arrows from the stock of members and potential members to these parameters. That is because the larger the membership, the larger the number of members retiring for a given retirement rate.

To dig deeper into what affects the flow into members from potential members, we need to look at the *new members from potential pool* parameter. This next level of detail is shown in Figure 15.
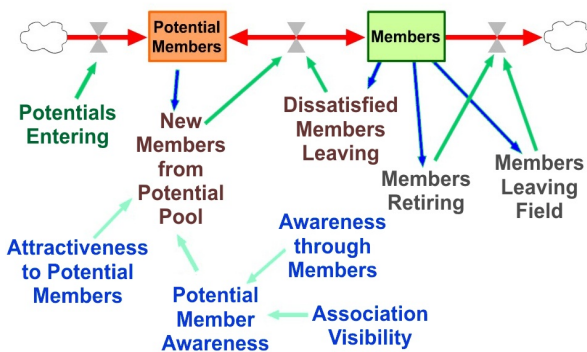

Figure 15

The first step for a potential member to become a member is for them to be aware of the Association. This is the parameter labeled *potential member awareness*. And potential members may become aware of the Association in two principal ways: either they are told by an existing member (*awareness through members*), or the Association (or club) has a high enough *public visibility* that the potential member becomes aware of the Association that way. But awareness of the Association is not enough to convert a potential member into a member; the Association also has to be *attractive* to the potential member.

There are other parameters behind these parameters as well. For example the *attractiveness to potential members* likely depends on a number of factors. One would be the initial attractiveness of the Association. But most people who were joining an association or club would also likely visit a meeting and meet some members. If the members are highly satisfied with the Association, then depending on how much *importance* the potential member places on current member satisfaction, they will be more likely to join.

Similarly, the *awareness through members* parameter depends on a number of factors including the visibility of members, how much the members spontaneously talk about their Association, whether the Association has an active program to encourage members to recruit new members, and so on.

Some of the relationships between the different parameters are strictly mathematical; for example the number of members retiring is simply the number of members multiplied by the percentage retiring each year. Other parameters cannot be objectively calculated, for example the dependence of member retention on member satisfaction; in these cases subjective dependencies are created. The creation of these relations is an important aspect of the process of system dynamics as this requires identification of the

understanding and assumptions you are making about the situation. Even just drawing the initial causal diagram as shown in these first few figures can be very enlightening with respect to which parameters are influencing outcomes.

Several of the subjective dependencies in this model are calculated from lookup tables. One of these tables is shown in Table 1.This shows member retention versus member satisfaction.

Member Satisfaction (%)	Member Renewal (%)
100	100
90	99
85	97
80	95
75	90
65	75
50	50
35	25
25	10
0	0

Table 1

The first column is the member satisfaction and the second column is the percentage of people renewing. In this table if the members are 100% satisfied then 100% of the time they will renew. If the members are 80% satisfied they are 95% likely to remain members, and so on as shown by the table. The numbers were chosen to reflect the observation that even if people are less than 100% percent satisfied they are still fairly likely to renew their membership.

Similar tables are used for other relationships as well. There are also adjustable parameters for factors such as how important is current member satisfaction to potential members?

This description of the model has so far focused on the *Systems* aspect. The *Dynamics* aspect of System Dynamics refers to the behaviors of these variables over time. In the absence of feedback, a given input would produce a defined output in a simple cause and effect relationship. (Note that this is often the perspective taken in organizations when analyzing problems or paths to goals.) But in fact in many situations – such as association membership – the parameters are not independent and fixed in time. The effects of stocks and flows is to create delays between cause and effect. As well, feedback results in the outputs modifying the inputs over time. Thus the system will exhibit a dynamic behavior.

Of course this is obvious in observing any association or club. Unless there is a fixed limit on the number of members, typically there are gains and losses of members. What a System Dynamics model can do for you is create a better understanding of the factors affecting gains or losses of members.

The model we have created includes key variables applicable to most associations or clubs. (For more details on the model please email rp@randypark.com .) Of course each situation will be somewhat different and model parameters can be adjusted accordingly. In addition there may be critical parameters you can identify for your association which are not included in this general model. This is one of the most valuable aspects of System Dynamics; the process of specifically looking at the critical metrics for your association. System Dynamic models are seldom easy to create but once the basic model is created it is usually easy for most people to understand. As a result, refinement of both the parameters and the model itself is carried out with the input of those closest to the situation.

About the Author

Randy Park specializes in helping individuals and organizations understand their decision making processes and their own thinking strengths and traps. His thought-provoking, entertaining sessions raise people's awareness of the critical assumptions they make that determine the results of their thinking. Perhaps most importantly, he helps them analyse when past experience is a useful guide and when it can hinder decision making. The concepts, processes, and tools presented help people obtain, consider, and use all the relevant information to achieve better decisions, faster solutions, and fewer mistakes.

Randy holds a Bachelor's degree in Physics from Simon Fraser University and a Master's in Engineering Physics from McMaster University. He worked designing world leading fibre optics equipment before his interest in thinking was sparked when he observed even brilliant people do some not-so-brilliant things.

In his first book *Thinking for Results - Success Strategies* Randy explains the core aspects of how we think and make decisions. In our information age information overload often results in decisions based on assumptions, ideologies, and ego rather than sound thinking.

Randy's second book *The Prediction Trap - and how to avoid it* extends the ideas of Thinking for Results to situations where we are looking to make decisions about the future or decisions involving other people. Randy also discusses four key trends which will affect our world and your place in it.

Randy is a member of the Canadian Association of Professional Speakers (CAPS), the Global Speaker Federation, and the Systems Dynamics Society.

Decision Advancement

In business, Randy brings several approaches from science: cooperation amongst professionals; creative thinking (not getting stuck in past experience); rigorous analysis of solid information; and recognition of thinking traps. He also believes in models as a way of increasing understanding and communications of situations. Just as numbers provide a way of allowing different people to identify and agree on quantities, models can provide a way of identifying and agreeing on the key components and connections in an organization or an industry.

Randy also brings an extensive study of human behaviour, incorporating evolutionary psychology, critical thinking, game theory, and how humans process information such as numbers, statistics, and risk.

Randy has presented workshops, keynote speeches, and facilitated sessions on critical thinking, decision making, scenario planning, and thinking tools to thousands of people in North America and Europe. He has facilitated or taught Scenario Exploration with the Ontario Power Authority, the Flexible Intermediate Bulk Container Association, the Canadian Association of Professional Speakers national board, Ontario Public Service, and in keynote speeches with many other groups.

More information

Articles, tips, videos, and more are available at www.DecisionAdvancement.com.