

Helping Not-for-Profit Enterprises Become More "Business-like": A Learning Organisation Approach

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Abstract

This paper describes the results to date of an investigation into the role of a system dynamics "microworld" model in helping a not-for-profit organisation (charity) become more "business-like" in its strategic management, and more able to evaluate impacts and opportunities in its ever more competitive environment. The organisation - the local division of a relationship advisory service in the U.K. - in common with most other charities is facing a more turbulent environment with major uncertainties in government grants, greater competition for voluntary donations, and changes in its perceived role. This requires the organisation to put much greater emphasis on effective management, but this may be regarded as diverting, and even in conflict with deeply held beliefs, by Board members, paid managers, and counsellors and volunteers.

The experience to date suggests that the development and utilisation of a microworld model of the organisation and its environment helps its members to envision the full implications of possible strategic developments. These developments include the impact and timing of direct advertising and the offering of contract advisory services to firms concerned that redundancies and other situations may put their employees under the sort of stress that could seriously affect their domestic relationships. This approach clarifies and aids the reconciliation of "business" performance measures like client contributions, cash flow management and training investment with such core concerns as counsellor morale and the service provided to its "clients".

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Introduction

This paper describes the use and potential of a System Dynamics model-based decision support system in helping a not-for-profit enterprise (NPE) reconcile the demands of its caring, charitable role with the realities of operating in a progressively harsher economic climate. The work is on-going and this paper briefly describes the basis of the underlying model, early use of the model in envisioning scenarios for the organisation adopting some significant strategic changes, and current on-going use of the system to help the organisation as a whole develop confidence and a holistic approach to operational management in the current environment.

The organisation - the local division of a relationship advisory service in the U.K. - in common with most other charities is facing a more turbulent environment with major uncertainties in government grants, greater competition for voluntary donations, and changes in its perceived role. This has required the organisation to put much greater emphasis on effective management, but practical experience of the realities of business-like management is not uniform across the whole organisation. Permanent managers or administrators that support the activities of such organisations will frequently have had wide business experience as may some of the typical boards of advisers or trustees. However many others in the organisation, particularly volunteers and others directly involved in the delivery of the "caring" service, may well have minimal or no management experience on which to draw. Indeed those with experience may themselves feel that NPE's are not the place for business type practices and many may regard them as diverting, and even in conflict with deeply held beliefs. A good example of such conflict was a proposal from the administration to charge a "broken appointment" fee which was opposed by the counsellors who felt that clients already had sufficient problems and did not want them to be discouraged from seeking support.

The senior administration within the organisation in question was acutely aware of the potential conflicts a more "managerial" approach might invoke, but was equally convinced of the need to adopt some more business-like practices. It was felt that a "learning organisation approach" to moving forward would have the best chance of enabling the administrators and others to develop their own managerial skills and to introduce new practices in a way that all viewpoints and beliefs might be accommodated. In particular the need was recognised by which new skills might be enhanced and for the impact of changes to be visualised, both with respect to typical managerial measures, such as cash-flow control and training management, but also in terms of such intangibles as volunteer / counsellor motivation and the quality of the service provided to clients.

A Learning Organisation Approach - The role of a Model-based DSS

A 'Learning Organisation' (LO) may be described as one which is organic and which has an organisational structure, information system and culture that is capable of learning from collective experiences to improve decision-making and competitiveness. It is claimed that LO concepts are relevant to companies in the 1990's because ideas of organisation, training and development have evolved sufficiently (e.g. Lessem, 1991, and Pedler et al., 1991.) While acknowledging that the territory of building *Learning Organisations* remains largely unexplored, it is felt that the key to a successful transition lies in the ability of the organisation to foster 'generative learning' or learning that enhances the 'capacity to create'. This is in addition to the more usual 'adaptive' or survival learning.

Senge, in particular, has evolved an interpretation of a *Learning Organisation* as one that is continually expanding its own capacity to create its future. It may be distinguished from traditional, authoritarian 'controlling organisations' by mastery of five 'disciplines' that clarify, challenge, enhance, and develop a shared vision of the organisation (Senge, 1991). There is also currently a great deal of interest in 'modelling for learning', (see, for example, Morecroft and Sterman, 1992). This approach was adopted in this situation and has involved the development of a system dynamics

micro-world which will, in time, assist in knitting together the learning disciplines within the organisation. Practice has been defined as "experimentation in a 'virtual world'" (Schon, 1983), and the absence of meaningful practice is probably a predominant factor which keeps most management teams from being effective learning units. Given the fundamental changes in both management process and the need for evolving attitudes and value-systems of some individuals, it was felt that the approach would be particularly appropriate. (see also Deakins and Winch, 1993)

Key Features of the DSS / Learning Model

The host enterprise is the major relationship counselling organisation in the United Kingdom. Pressure on funding has become a major issue at all levels which has resulted in a reduction in the number of counselling centres. Cuts in the central government grant and recessionary effects on fund-raising have been accompanied by considerable increases in the level of demand for services. This focus of attention on client contributions and service provision resulted in a competitive strategy being proposed for the local branch of which was mindful of the unique nature of non-profit making institutions (Blatchford et al., 1992). Of the generic strategies available, expansion was judged the most desirable. A supporting operating strategy of commercial partnership and enhanced promotion of image is aimed at providing a high quality service. The particular value of a system dynamics model to evaluate such strategies and to develop the organisation's ability to implement them effectively was identified, and such a model was developed using Professional DYNAMO Plus utilising the DYNEX interface linked to a graphics package to improve the ease of use of the model and to enhance the output graphics obtained. (Pugh-Roberts Associates, 1991)

Figure 1 shows the basic structure of the system dynamics (SD) model. Key material lows and stocks are identified, which were judged to represent the essence of the system:

- i) Catchment area population (PPOP);
- ii) Service hours demanded by the general public (DSHGP);
- iii) Service hours demanded by contract clients (DSHCC);
- iv) Number of counsellors undertaking training (NCUT);
- v) Number of trained counsellors (NTC);
- vi) Profit/loss (PRFLS).

Clients were divided into 'General Public (GP)' and 'Contract Clients (CC)'. GP clients come independently to seek support for their relationship problems knowing of the organisation's national reputation, or may be referred by other agencies like general practitioners. Contract clients were a new concept to be investigated, whereby the organisation would enter into a contract with local firms to provide routine support for their employees, but particularly to assist in relationship problems that might arise as a result of redundancy, staff relocations etc.. Counsellors were divided into 'trainees' and 'fully trained' as this has implications for training rates, costs and available service hours. The model also contained the necessary accounting relationships needed to capture the cash-flow management aspects of the organisation, including provision to account for government funding, legacies and other forms of direct funding, as well as the revenues coming from client contributions. (General Public clients are expected to pay for the counselling received, this is not based on fixed charges but on an agreed fee which would include consideration of the clients' ability to pay.)

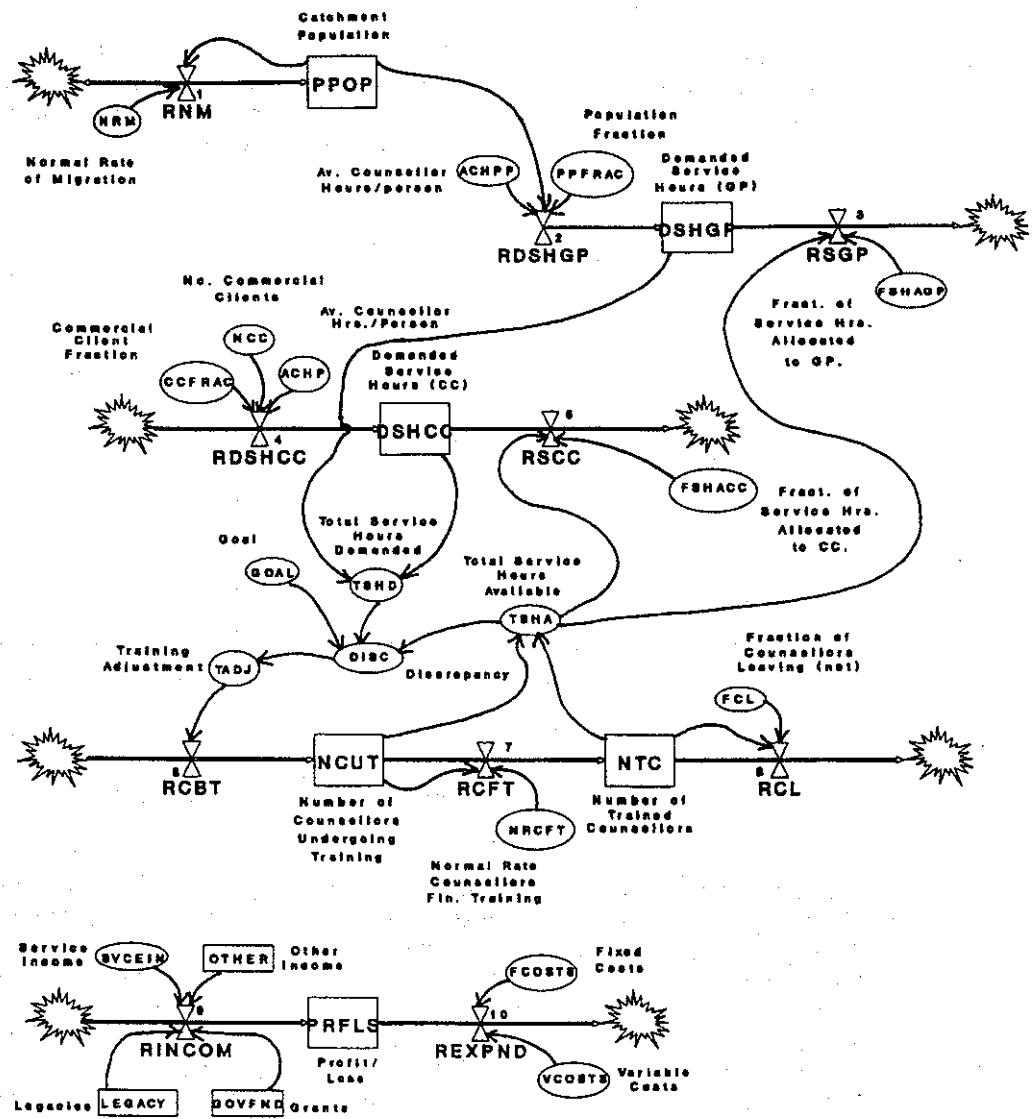


Figure 1 Basic Structural Diagram

The appropriate relationships and values to use when attempting to describe qualitative values such as morale, quality and marketing penetration must be subjective, but to ignore them would have led to an unsatisfactory model formulation. Two of the key assumptions are:

Counsellor Morale

Figure 2(a) shows the assumed value of Counsellor Morale (versus workload) used in the simulations. Counsellor workload was defined as the ratio of manager-specified total hours to maximum (contracted) total hours. The assumption that morale is simply a function of workload is in line with the system boundary chosen. Small increases in workload above unity are acceptable, beyond which morale rapidly deteriorates. Morale is assumed to stabilise, or even suffer, if workload falls too far and counsellors become concerned about their job security.

Service Quality

The Service Quality Factor, also shown in Figure 2(b), reflects the standard of counselling. It assumes that a better service will be delivered when there is less work pressure and stress on the counsellors. As soon as workload exceeds the value of unity, service quality is reduced right away even though counsellor morale remains unchanged.

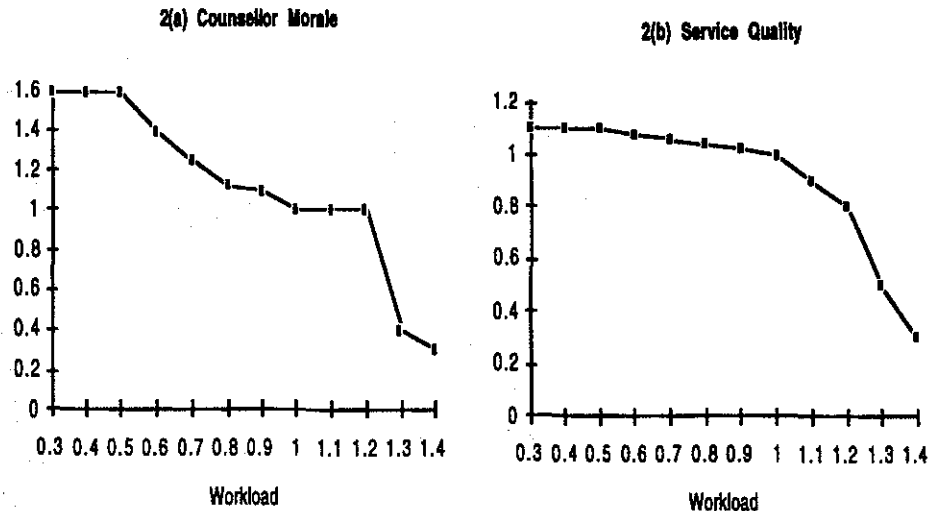


Figure 2 Key Model Assumptions

Table 1 summarises the main features of the micro-world, which was developed in consultation with the host organisation, its specialist knowledge of the sector being supplemented by formulations based on the model developers' knowledge of general business processes and issues. Winch (1989) has previously observed the value of such joint model development in the sense that it might be considered as forming a "hybrid expert system", transferring and contextualising knowledge and expertise from an external adviser or other experts through the model. The microworld retained the SD model kernel to which was added elements of gaming to produce the final decision support / learning model. The aim was for an integrated package which would maximise learning opportunities within the firm and which would, in the first instance, satisfy the *Learning Organisation* objective of fostering improved mental models through experimentation. The system is designed to be easy to use, friendly and provides an integrated decision making and learning environment.

- > Context-sensitive menu system;
- > Full screen prompts with defaults provided;
- > User-specified parameter and table values;
- > Range checking of input values;
- > User-defined switches to change model structure;
- > Context-sensitive and layered help system;
- > Interim snapshots and time-series results;

- > Full-colour screen graphs with auto-scaling;
- > Hardcopy of user-specified graphs and reports:
 - Financial
 - Employees
 - Productivity/Capacity;
- > Policy creation/comparison with alternative policies;
- > Decision proforma print facility;
- > Decision tracking facility to aid replays;
- > Graphics output link to proprietary software.

Table 1 Main Features of the Micro-World

Model-supported Strategic Visioning

Early experimentation with the model provided the opportunity for the organisation to investigate some of the strategic options available to it, and, in particular, to start envisioning what it would be like when operating differently in the future. Historically operations had revolved around a comparatively simple process of maximising the provision of counselling services to the general public, with financing coming from contributions from those receiving the counselling subsidised by government grants, donations and other charitable sources. Shrinking government funding combined with increasing competition for voluntary donations poses major problems as direct contributions from clients continue to fail to cover costs.

Two strategic options had been identified:

- The use of advertising campaigns to attract more general public clients, in the hope that volume leading to higher counsellor workload would produce greater efficiency in utilising financial resources.
- Attracting commercial contract clients, by which the organisation would provide agreed levels of service to companies and other employers to counsel their employees with relationship problems. Revenues per counselling hour would be expected to be significantly higher than the average general public client contribution, whilst costs of providing the service should remain basically the same. However it was expected that the quality of the service provided would be a much more sensitive issue with commercial organisations.

Both of these strategies could lead to futures that would be significantly different to the past, with "business" type issues of counsellor workload and quality of service becoming key issues. A number of future scenarios were reviewed that involved these options separately or in combination.

Of particular concern was counsellor morale with high workloads - though this may also be a problem when workloads are very low. It was also felt that the perceived current insensitivity of GP clients to service quality might change as workloads increased, and that quality might become an issue with them too. The model was therefore used to compare scenarios that included increased workload with further options that included the recruitment of additional counsellors so that more contract clients could be taken on, while at the same time GP clients could be given a higher quality service. The results from these sets of runs are summarised briefly here.

Figure 3 compares a base policy, in which the capacity to service both GP and CC clients is being achieved by staff working under pressure, with an alternative policy which, in addition, pursues the quality option involving employing extra counsellors. The extra counsellors come on stream after June '93 and it is assumed that good service is rewarded with higher contributions and improved client return rates, and vice versa. Figure 3(a) shows that perceived GP client quality lags behind actual delivered quality (and the quality perceived by CC clients) due to a built-in perception delay which smooths the most recent delivered quality values. Increased demand for services as the result of a superior service is shown in Figure 3(b), which also accounts for anticipated patterns of seasonal demand. While the attraction of contract clients will improve cashflow for both policies, the higher level of GP client contributions for a quality service is shown in Figure 3(c). This provides improved income, hence better cashflow throughout the year, Figure 3(d).

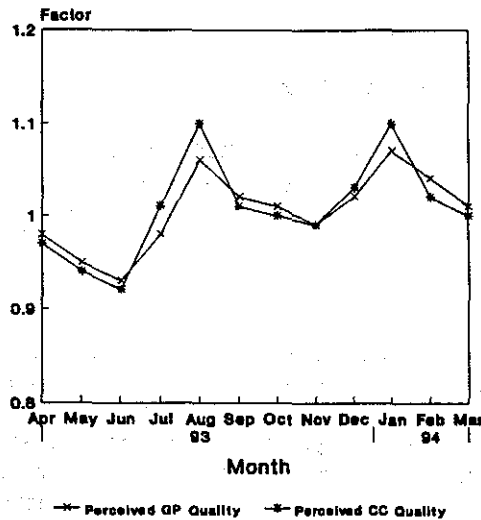


Figure 3(a)

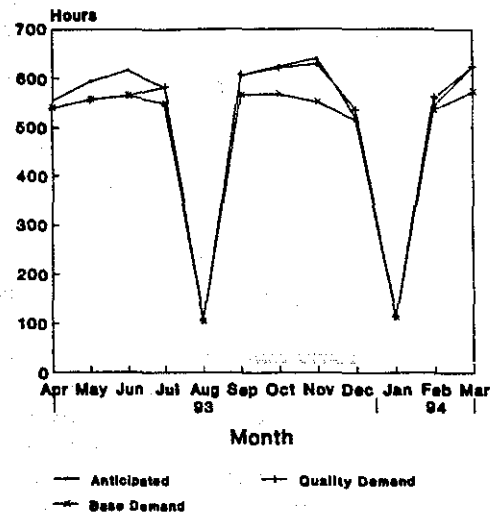


Figure 3(b)

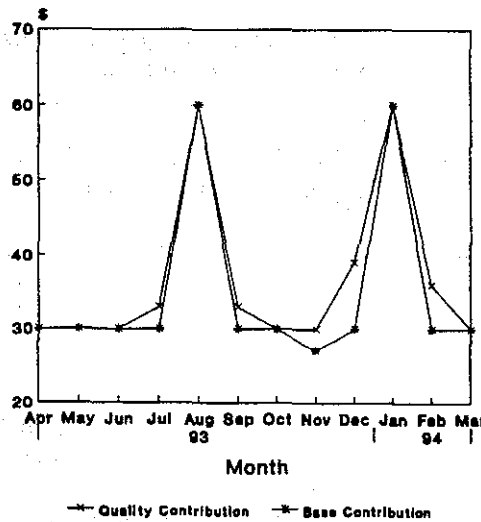


Figure 3(c)

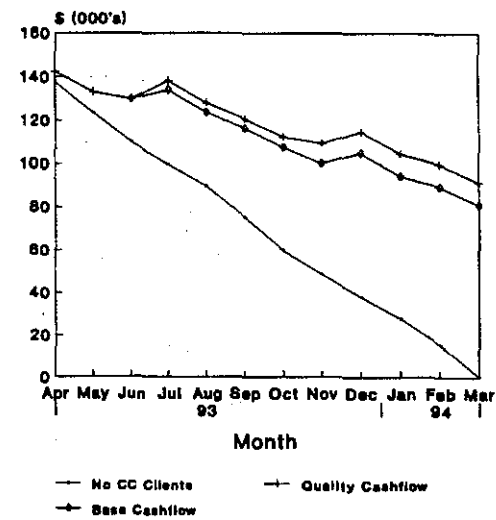


Figure 3(d)

Figure 3 Envisioning Strategic Change Options

The additional costs incurred by employing extra counsellors and subsidising the extra GP clients have been more than offset by making service quality the competitive strategy. Indeed, the superior cashflow of the quality option indicates that a point of high leverage has been identified in the system. The base policy simulation indicates that maintaining counsellor workload at a high level, in the belief that heavy workload equates to high efficiency, is a mistake. Reduced client contributions for a poor quality service will (ultimately) lead to less investment in staff and hence even lower service quality, as workload increases further.

The Realities of Operational Management in NPE's

At the time of writing this paper no contract clients have in fact been obtained by the organisation since the original series of trials with the system (in early/mid 1993). General public clients have, however, increased quite significantly probably due, at least in part, to the continued recession and concomitant high unemployment. This increased supply of GP clients has also meant that no advertising campaigns have been tried.

Nevertheless, the fact that none of the earlier options has so far been implemented did not negate the value of the experimentation with the model, as it was felt that working with the model played a valuable role in helping the organisation's management develop a "feel" for its task in these progressively difficult times. In particular a greater understanding of the interactions between workload, counsellor morale and quality or service was achieved, and this contributed towards the decision not to advertise and attract further GP clients while these were rising anyway - even though it might have been thought that capacity existed as no CC clients needed to be serviced.

The continued financial squeeze has subsequently limited the ability of the management to resource much wider use of the system (a problem compounded by the theft of their computing equipment). It has also prevented it developing other learning organisation activities to any great extent. The system is now being used to review the previous year's operations in order to develop further an understanding of why things emerged as they did, and to investigate what might have been the results if certain other decisions had been made, or events had occurred differently. An important feature of this model is that it does replicate fully the cashflows and other financial aspects of the organisation, and this enables it to be used in detailed work in these areas. This serves both to help understanding of the processes involved, which are becoming relatively more important to the organisation, and to develop confidence in the system itself.

Besides enabling the organisation to envision longer term possible strategic changes, the model is intended to serve also as a decision support tool to aid the manager in operational decision making; validation of the model in terms of this purpose is thus an important requirement. By using the gaming facility of the system to run forward on a month-by-month basis, the shorter- and medium-term impacts of operational decisions can be investigated. Such decisions involve the scheduling of additional counsellor hours, counsellor recruitment and training schedules, and the impacts of timings of government and other funding receipts.

Conclusions

The micro-world described can be readily adapted for many service organisations. To-date, it has been well received by the host organisation for strategy formulation and for operational policy making. This represents an important first step in the *LO* transition process to improve decision-making and competitiveness. It has proved particularly valuable in assisting in the reconciliation of the need for "business-like" decision-making with the particular constraints and wide stakeholder values and perspectives in a not-for-profit caring organisation. The model has already played a valuable role in deepening the personal vision of the administration within the organisation, surfacing and enhancing mental models, and knitting together the various disciplines and perspectives to give a global view.

There remains a significant amount of work to integrate the remaining *LO* concepts into the host organisation to fully exploit its ability to assist in the development of team learning. Nevertheless, the

study has demonstrated that system dynamics computer modelling, when used with a suitable user interface, can play an important role in integrating key *Learning Organisation* concepts, in a manner that enriches the overall purpose of the organisation and the individuals within it.

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