Introducing *VSMethod©*

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This paper introduces the iterative consulting methodology, proprietary to Beckford Consulting, which has evolved as the cornerstone of our consulting practice. ***VSMethod***© stands on its own as a methodology for assisting Clients in the resolution of complex organisational and informational problems while supporting the Client specific development and application of the ***VSSuite***© of information management and decision support tools. ***VSMethod***© has been applied in the Transport, Logistics, Healthcare, Property, Finance, Steel, Education and Food industries with a wide variety of organisations including: Northumbrian Water, The Congregation of the Sisters of Nazareth, Grontmij, 1E, Astra-Zeneca, Fusion21, GNER, National Express and in Research Projects for DeFRA, BiS, Core Cities and many others.

Introduction

Thinking about organisations, models and systems in terms of their capacity for adaptation and survival forms the basis of the work of Beckford Consulting. We are not only interested in short-term fixes and payback but in the overall viability of the organisation – its ability to be both efficient and effective and to survive into an increasingly uncertain future.

Contemporary viable systems thinking originates for us in the work of Stafford Beer (1959, 1966, 1979, 1981, 1985, 1994) but has been extended and developed by Beckford (1993, 1995, 1998, 2002, 2010) and Dudley (1998, 2000), and Beckford and Dudley (1998, 1999a, 1999b, 2001). Other influential work includes Lovelock (1979, 1988, 2001), Margulis (1998), Clemson (1984) and Espejo & Schwaninger (1993).

Viable systems modelling (Beer 1985) has been criticised (Ulrich 1981, Flood & Carson 1988, Flood & Jackson 1991) for difficulty of use in practice and for a claimed susceptibility to autocratic abuse. While these criticisms do not hold when rigorously examined (Beckford 1993, 1995) it is certainly the case that the language of organisational cybernetics and the viable system model itself is not widely used or understood and that the lack of a coherent participative methodology has inhibited the delivery of full value from the principles underpinning the approach. Beckford (1993, 1995) initially addressed these criticisms with a Participative Methodology for Viable Systems Diagnosis developed from Beer (1985) and Flood & Jackson (1991).

This paper proceeds from Beckfords' 1995 work to consider the role of the Viable System Model (VSM) at all phases of the relationship with a Client from initial exploratory discussions through to project completion. Throughout the consulting process the VSM is used as an idealised representation of organisation through which the Client's problem can be interrogated and, arising from the dialogue, shared understanding of the problems or issues and the appropriate approach to their resolution can be developed.

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Readers unfamiliar with the work of Stafford Beer should refer to Beer 1979, 1985 or Beckford 1993, 1998, 2010 for fuller explanations of the principles underpinning the Viable System Model.

Outlining the Problem

The essence of effective consulting is to transform a Client with a problem into a Client without a problem. The business proposition rests in the ability to understand the Client problem and support them in carrying out that transformation whilst, in most cases, putting in place an information system (for Beckford Consulting this is ***VSSuite©***) which enables them to continually 're-solve' the problem without our further help. This also provides the basis for effective representational modelling and simulation.

In this section it has been assumed that a process of marketing has succeeded in putting the lead consultant in front of the Client. The objective of the meeting is to be invited to submit a project proposal. In order to do this a number of things must be achieved:

> The prospective Client must be persuaded that the Consultant has the capability to 'solve' the problem;
>
> The Lead Consultant must be comfortable that his or her organisation (including its Associates) can solve the problem;
>
> The constraints (time, money, freedom to act, immovable barriers) acting on the prospective Client must be understood;
>
> The value to the Client of solving the problem must become clear.

The first two of these are vitally important – if the Client does not believe the consultant has the ability – or if the nature of the problem is outside the scope of the collective abilities then there will be no project. The third and fourth items are 'steering' information – they inform the way in which any project proposal is worded, the pricing of the project and so on.

The process begins with a dialogue between the prospective Client and the lead consultant. This can start in one of two places:

> The prospect explains the problem or
>
> The experience or capability of the consultant is explained;

Either of these two routes (and the route depends on the Client) leads to a point where it is legitimate to ask the Client to fully explain the problem, its background, impact on the organisation and the benefit of solving it. At this stage the Lead Consultant is using the idealised VSM as a mental frame of reference (or filter) for 'diagnosing' the problem at a high level. That is with little detail the Clients explanation of the problem and organisational context is being

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'mapped' by the consultant to his or her mental model of the VSM. What begins to exist in the mental space between the two is a 'picture' of the problem. The process is revealed in figure one below.

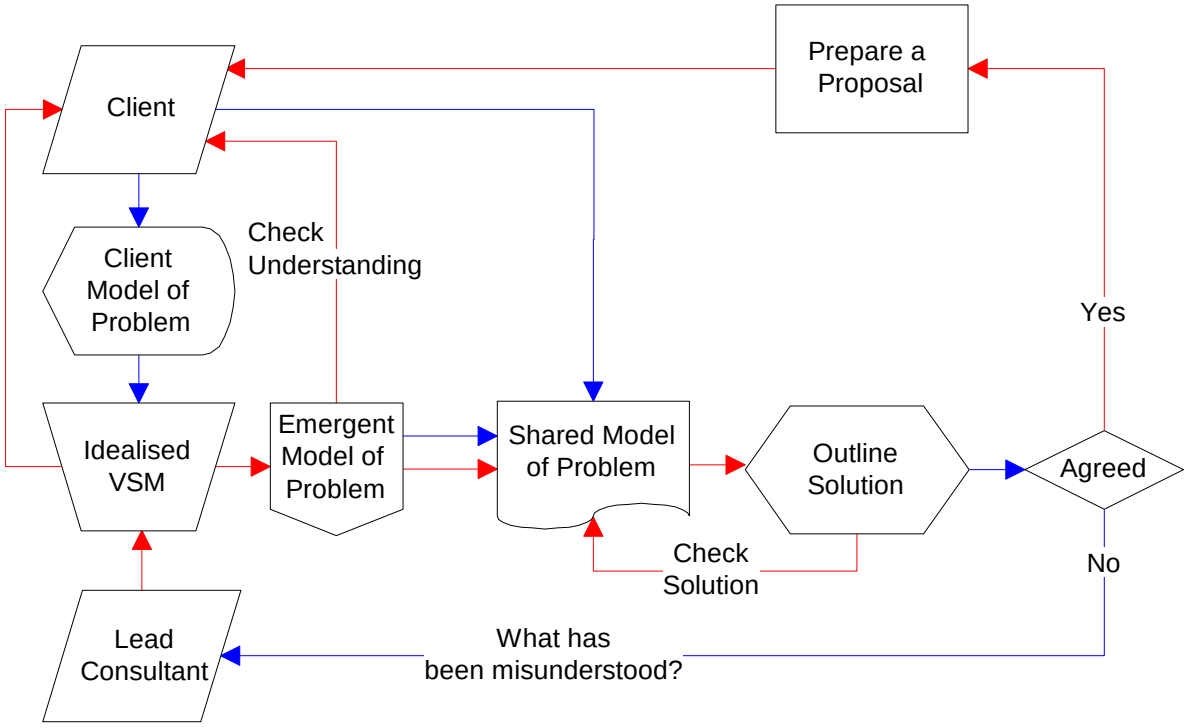

Figure 1

In this diagram the red lines indicate the activities of the consultant, the blue lines those of the Client. The Lead Consultant 'interrogates' the Client problem through the filter of an idealised VSM. The Client explanation is filtered back through the idealised VSM to create an emergent model which is checked against the Client problem, this validation loop leading to a shared model of the problem against which an outline solution can be proposed. In essence this outline solution will seek to close the gap between the shared model and the idealised VSM. If the outline solution is agreed then discussion about the possibility of a proposal takes place. If the outline solution is NOT agreed then the Consultant must revert to the interrogation of the problem to understand what has been missed or misunderstood.

Wherever possible the proposal is drafted in the presence of the Client (at least in outline) so that the costs, timing, project constraints and so on have all been aired before the formal proposal is submitted – this acts as a further validation to the appropriateness of the outline solution against the Client expectations.

Starting the Project

Any solution once created must hold to the principles of viability. That means:

The solution must enhance the viability of the Client organisation;

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The solution itself must adhere to the principles of viability;

Delivering the solution must enhance the viability of the consultancy.

The first action on commencing the project is to revalidate the shared model and to reconfirm the desired outcomes – it is explicitly recognised that all organisations exist in a dynamic environment in which the problems and their solutions change over time.

Each project is divided into a series of discrete phases. Phase One develops a detailed understanding of the Client problem, validates the outline solution and confirms the project scope and cost to the Client. Phase Two develops a working prototype of a final solution, this may take several forms:

a prototype of a management system, model or simulation;

assessment of full implications of organisational change as applied to one area;

a draft presentation or costed series of change proposals.

Phase Three seeks to implement the draft, taking action in relation to whatever has been agreed at the end of the previous phase. Phase Four (usually very short) has three key purposes:

to validate the solution;

to confirm that the project is complete from a practical viewpoint;

to ensure that further needs, identified during the project, have been fully explored with the Client.

Figure two outlines the process. At the end of each phase, the work done must be demonstrated to the Client and his/her acceptance obtained- especially as this tends to be the point where the Consultant issues invoices!

Creating the Model

In essence – and this is where life gets a little complicated – in delivering the project two things have to be done in parallel:

manage the project;

carry out the project.

These are inextricably linked but must be perceived as separate and the relationship is shown in figure two – the management process – consisting of continuing referral and review interacting with the delivery of the project.

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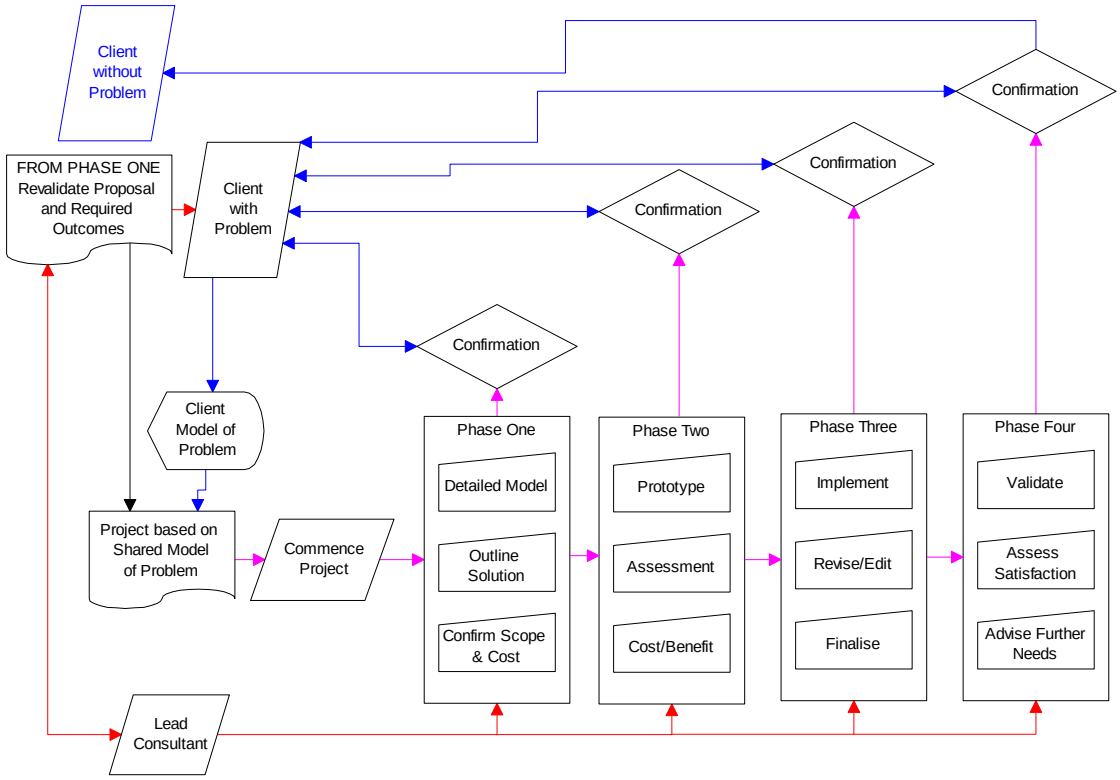

Figure 2

The project has its own levels:

> To analyse, in absolute detail and with absolute precision – disinformation not withstanding – the process(es) which deliver the Clients service to its customers;
>
> To analyse, rigorously, how the process is managed – the control system – the structure of the organisation, model or situation simulated and the decision making through which the Client attempts to control the process.

Creating in the early stages an effective, and generally accurate, model of a process the Consultant must also understand the management process which purports to control it. It may be that the 'faults' lie in the management of the process rather than in the process itself. Similarly, any large scale model or simulation may have multiple recursions and multiple interactions within its control mechanisms, any or all of which might impact on the accuracy of the outcomes. This general principle is explicitly dealt with through the understanding of viability on which the method is based, derived from the interaction of the 3-4-5 and 3-2-1 homeostats in Beers VSM. Dudley and Gant have utilised this understanding in considering the upstream/downstream impacts of altering effectors in genes (Dudley & Gant, MRC Study) showing that it is *not* just the action of the entity itself *in isolation*, but its *interaction* with other entities which might be important.

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In generating a model steps must be taken to ensure that it fits adequately. Whilst the impact of this on the client may be negligible, the impact on the consultancy (failure to deliver on time, cost over-runs, distraction form other projects) can be quite extensive.

Solving the problem at this stage may mean a full redesign and complete rebuild of the core engine which drives the model or simulation.

It may also be found to be necessary to create multiple models of the situation to resolve different interpretations of the 'facts' about a situation. For example, it was found on one project that the client employed three different organisational models – one for each shift.

Completing the Project

Once the model or simulation has been built and 'internally' tested it can be fully exposed to the Client. Although there will have been a persistent dialogue throughout the project period, this is the point at which the Client accepts the project as complete. To confirm this it is essential to lead the Client through the initial diagnosis, conceptual and practical solutions to demonstrate the compliance of the outcome to the project specification.

Differences or variances should have been resolved through the project dialogue although there will usually be minor revisions of presentation to undertake.

The client being satisfied, the Consultancy organisation should focus on an internal review to consider the overall success of the project and any improvements which could be made to its approach.

Conclusion

This paper has briefly described the consulting methodology, ***VSMethod***©, developed and applied by Beckford Consulting to a wide variety of projects over recent years.

It is intended to extend the paper in due course to explore the theoretical justification for the approach in the context of the wide variety of systems methodologies from Operational Research through to Critical Systems Heuristics.

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