

ESSENTIAL ANALYSIS SKILLS

A KOIOS GROUP COURSE ON

THE APPLICATION OF SSM TO MANAGEMENT PROBLEM SOLVING

WHAT IS SSM? Soft Systems Methodology (SSM) is an analytical approach for tackling complex messy problems. Complex messy problems are those whose definition changes according to the different perspectives of the observer (i.e. almost any area involving people). Using SSM brings structure, coherence and an explicit defensible audit trail to the analysis.

WHY IS SSM “SOFT”? The "Soft" in the title refers to the type of problems that can be tackled using the technique, *not* to the rigour of the approach. Professor Brian Wilson will lead the delivery of a Koios Group course on the 'Application of SSM to Management Problem Solving'; Brian was a member of the group at Lancaster University which originally developed SSM. He is driven by the desire to apply the sort of rigorous thinking of the 'traditional' engineering paradigm to less predictable "*Human Activity Systems*" and has used SSM to address a wide range of complex organisational problems; copies of the 2 books he has written along the way will be given to delegates as part of course materials.

HOW IS SSM USEFUL? SSM is a powerful tool for unearthing implicit assumptions and competing purposes that can de-rail an organisation's endeavours to transform if they are not understood and addressed. As a method of analysis it is:

- Strategic (top-down and forward looking).
- Explicit and defensible.
- Rigorous and auditable.
- Flexible enough to apply to all types and size of organisational problems.
- Consensus building.
- Outcome focused.

WHERE CAN SSM BE APPLIED? SSM has been used successfully to tackle problems in almost every area of human endeavour; from prisons to the theatre, from defence and Intelligence to banking, from health to publishing, from education to meteorology. It has been applied successfully in Commercial, Government and Academic organisations to tackle issues in the areas of Strategy and Change, HR and Training Development, Programme and Benefits Management, Capability Acquisition, Requirements Engineering, Enterprise Architecture Development and Strategic & Operational Process Improvement.

WHO WILL BENEFIT FROM ATTENDING THE COURSE? The course will be useful to anyone who is involved in complex programmes of work or organisational analysis. This includes those who need to:

- Shape complex programmes of work;
- Achieve coherence between different initiatives;
- Develop shared understanding across organisational boundaries;
- Align analysis with the goals of the organisation;
- Define measures for provision of services relevant to an organisation;
- Define future states for an organisation;
- Develop a coherent set of requirements for Capability Acquisition and Development.

WHEN AND WHERE IS THE COURSE? Details of dates for the next course can be found on the Koios Group courses calendar at <http://www.koiosgroup.com/courses>.

HOW DO I BOOK MY PLACE? E-mail courses@koiosgroup.com to find out more or reserve your place.

SOFT SYSTEMS APPROACH TO MANAGEMENT PROBLEM SOLVING

OBJECTIVES OF THE COURSE

Introduction

Soft Systems Methodology (SSM) is, in essence, the application of systems ideas to situations which can be regarded as “soft”. This applies to all organisation-based situations and, because the applications are “methodology” led, the degree of variety in the concepts available, together with their modes of application, achieve the degrees of variety required for all types of organisation-based analysis.

In the 3⁽¹⁾ days available, members of the Koios Group, who themselves all have significant experience in developing and applying the techniques of SSM in complex real-world analyses, will:

- Provide a comprehensive overview of the concepts and approaches available.
- Illustrate the range of SSM's applicability through reference to diverse previous uses in complex projects.
- Provide ample opportunity to practice techniques through a series of tutored practical applications.

Professor Brian Wilson (whose biography is attached) leads delivery of the course on behalf of the Koios Group. Brian was a member of the group at Lancaster University which originally developed SSM and he has been driven by the desire to apply the sort of rigorous thinking of the ‘traditional’ engineering paradigm to less predictable "Human Activity Systems.". He has used SSM to address a wide range of complex organisational problems and copies of the 2 books he has written along the way will be given to delegates as part of course materials.

Workshop Objectives

Given the nature of SSM as described above, and in the time available, those attending will gain an understanding of how to exploit the approach and should also develop a degree of practitioner capability. Whilst the latter may vary between students' individual capabilities, it is intended to achieve the following in relation to each participant:

- Knowledge of the basic concepts available to tackle complex problems.
- Knowledge of more advanced concepts related to an “Enterprise” view of organisations.
- Illustration of the application of the range of ideas and approaches through discussion of recent consulting activity.
- Illustration of the specific use of SSM for information requirements specification in complex situations.
- Practical involvement in the derivation and use of the basic concepts.
- Sufficient appreciation of the range of ideas and their application to provide the starting point for further development.

¹ Note: 3 days contact time is Mon afternoon through Thu lunchtime

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COURSE STRUCTURE

The overall structure of the course is based upon the need for three kinds of session. These are necessary to:

- (a.) Provide an understanding of systems language.
- (b.) Illustrate the variety of methodologies.
- (c.) Provide practice in the use of the (a) and (b) above.

Both the understanding in (a) and the illustration in (b) are related to practice. A minimum of theory is presented though some is necessary if the context in which the ideas are applied is to be properly appreciated and if the meaning of the ideas is to be fully understood.

Learning to use soft systems ideas is rather like learning to swim. In both cases the concepts are quite easy to describe but it is necessary to get into the water to develop the ability to use them.

For this reason the course is highly participative (hence the numbers attending are ***strictly limited***) and students' abilities are developed by using a structured set of involvements which build upon each other to assemble an overall appreciation by the end of the course.

The individual sessions are as given below

MONDAY	
14:00 – 18:00	<ul style="list-style-type: none">• SSM overview (up to deriving Root Definitions – Conceptual Models)• Group work (Root Definition formulation to Conceptual Model)
TUESDAY	
09:00 – 12:30	<ul style="list-style-type: none">• Issue-based analysis (including <i>Rich Pictures</i>)• Methodology Derivation
14:00 – 17:30	<ul style="list-style-type: none">• Participative exercise – Albion Group Session 1
WEDNESDAY	
09:00 – 12:30	<ul style="list-style-type: none">• Information requirements derivation (leading to Consensus Primary Task Model (CPTM) requirements and Maltese Cross)• Methods for deriving a CPTM
14:00: - 17:30	<ul style="list-style-type: none">• Participative exercise continued – Albion Group Session 2
18:00 – 22:00	<ul style="list-style-type: none">• Short introduction to System Dynamics• Social activity

THURSDAY
09:00 – 12:30 <ul style="list-style-type: none">• Organisation Mapping• Short introduction to supporting tools (incl Mood)• Plenary Discussion
<i>Lunch and Disperse</i>

N.B. Because of the participative nature of the course the length of any session is variable, thus only the start times are given. Breaks will be taken for coffee and tea as appropriate.

Professor Brian Wilson

In 1966 Brian Wilson left the world of nuclear power engineering and control system design, to become a founder member of the Department of Systems Engineering at the University of Lancaster. During his time at the University he was involved in the development of a particular form of business analysis known as Soft Systems Methodology (SSM) This development was driven by the Action Research programme carried out in that Department, in which his particular interest, was the application of SSM to information and organisation-based analysis. The work appeared in the book, "Systems: Concepts, methodologies and Applications", (editions 1&2), published by John Wiley.



He left the University in 1992 to found his own consultancy company; Brian Wilson & Associates, where he continued to develop and apply his particular brand of SSM, leading to the uses of SSM in "Enterprise" model building.

He has 40 years of experience of tackling organisation-based problems of various kinds and, he has undertaken projects in the Pharmaceutical industry, The Met. Office, The Office of Government Commerce, (OGC), The M.O.D., the Police, the N.H.S. and a variety of other organisations in both the private and public sector.

In July, 2001, he published a further book which aimed to capture previous lessons and new developments related to SSM-related business model building. This was also produced by J.H.Wiley and is called:

"Soft Systems Methodology—Conceptual model building and its contribution".

Recent work has been concerned with the development of SSM-based models to bring about the integration of children's services within Tameside; to contribute to the M.O.D.'s "Carrier Strike" programme and to explore the organisation of the detection and containment of illegal importation and use of nuclear and radiological materials as part of the anti-terrorist programme, "Cyclamen". Also a contribution was made to the development of an "Enterprise" architecture for Information Assurance in the public sector and to the development of new information support across a number of publishing companies within Hachette Livre.

He has had an association with Cardiff University for a number of years, in a variety of roles, and has recently been conferred as an honorary Professor of Applied Systems Thinking in the Department of Computer Science.

Brian is currently "practice" lead on SSM within the Koios Group.