

Viable Systems Model

Made simple

Viabile Systems Model

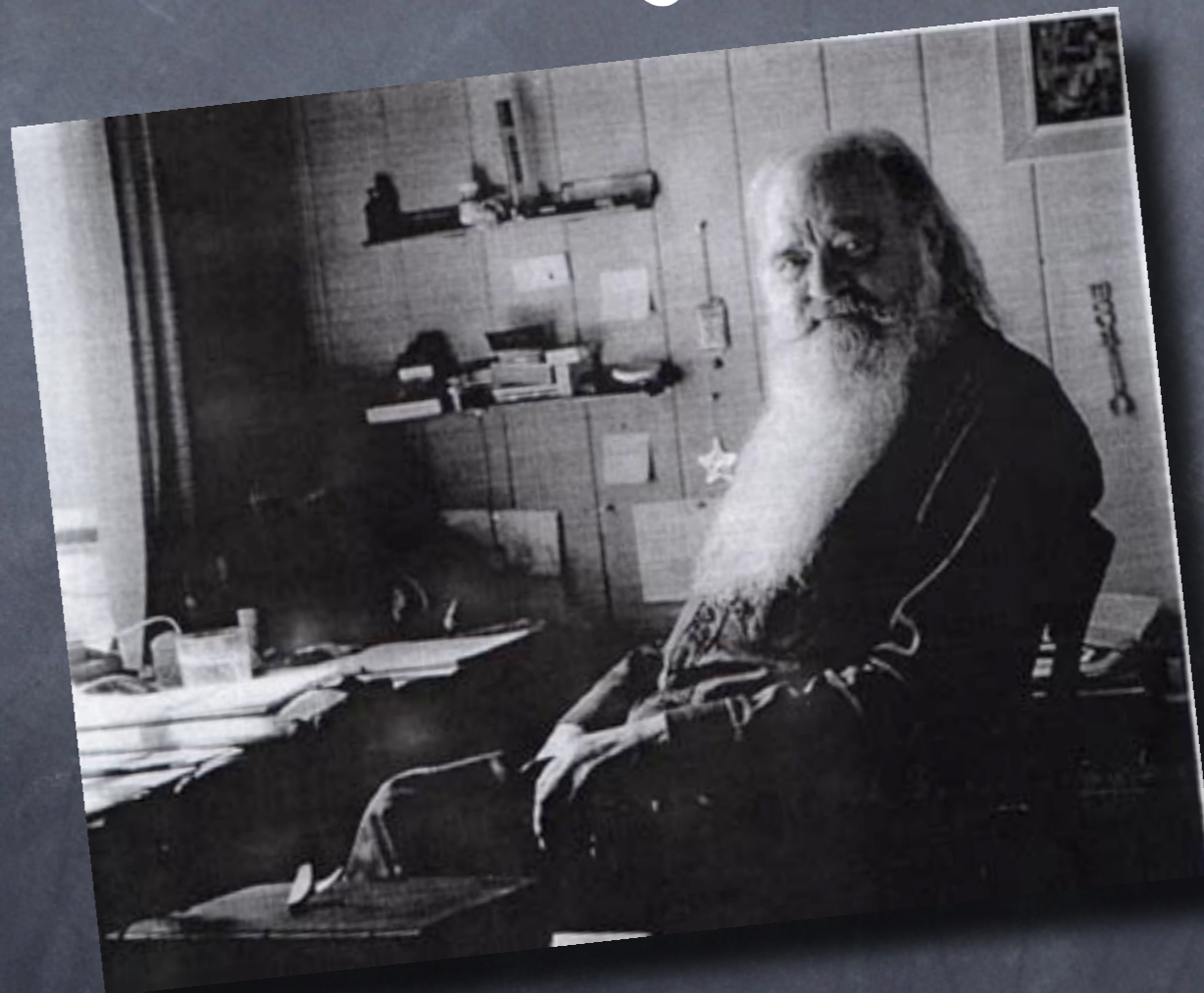
The Viabile Systems Model (VSM) is exactly what it says it is. A model of the underlying principles that are both necessary and sufficient to make any system viable.

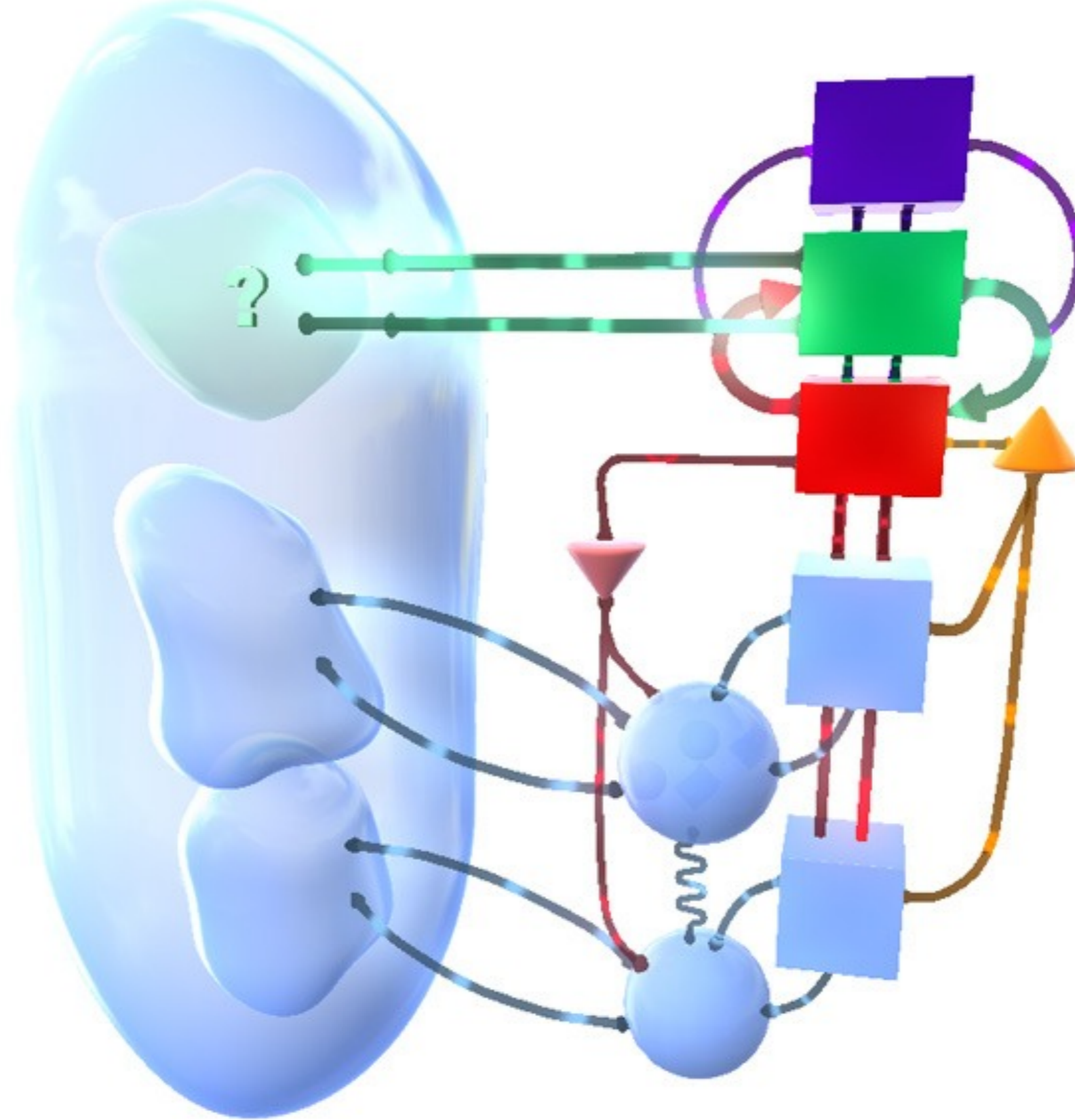
The VSM, as a rigorously researched application of cybernetics (the science of organisation), is considered by many to be the most useful, accurate and up-to-date map of viability available.

Stafford Beer

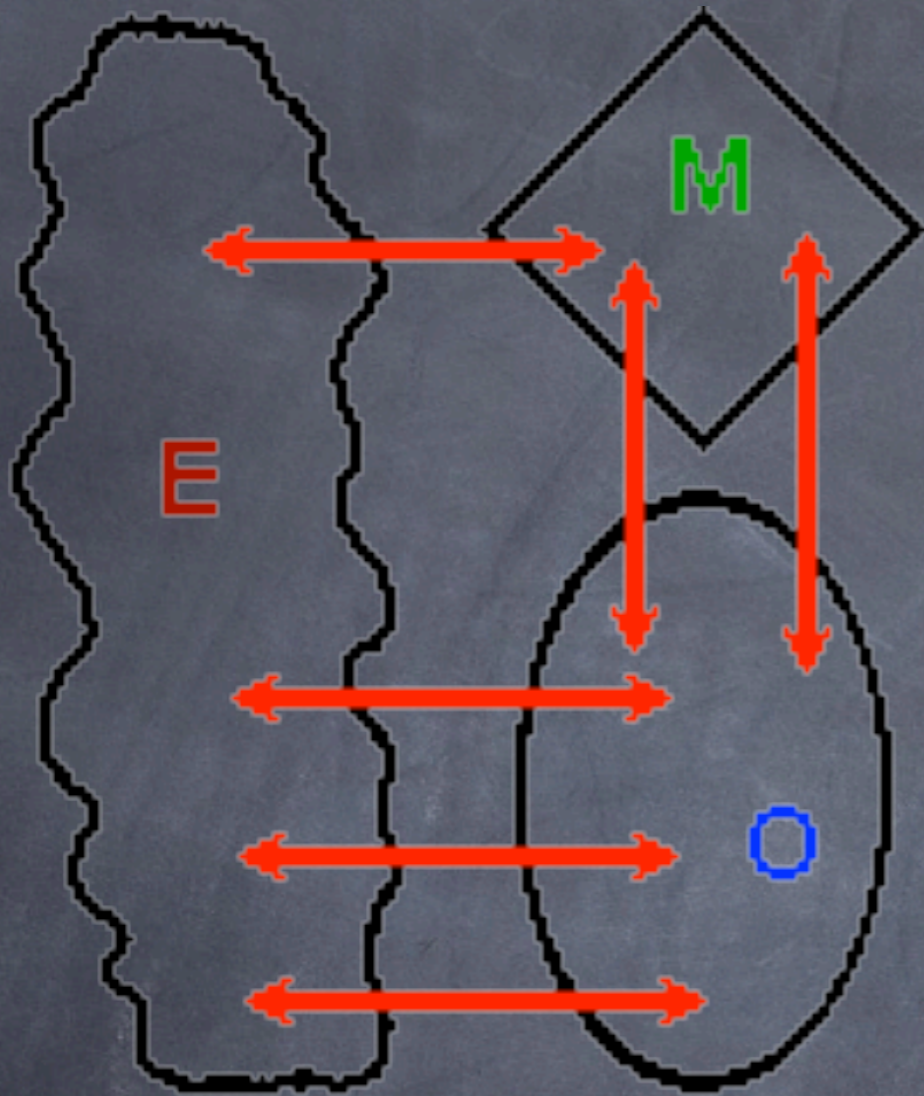
On Stafford Beer's gravestone is written his mantra
'The Purpose of a System is What it Does' and this
is fundamental to his thinking.

Professor Stafford Beer
died on August 23, 2002.





Perhaps the most effective system of control is the human nervous system; able to maintain our viability in a rapidly changing world. If we identify the key control mechanisms that ensure this viability, we can create a model that might be applied to a business or any other social organization.



- E represents the Environment
- O represents the Operation
- M represents the Metasystem

The arrows indicate the many and various ways that the three parts interact. Each arrow may have several aspects - it may be information, or trucks, a phone call

The Viable Systems Model is based on 5 systems which are seen as fundamental to viability.

If all 5 systems are working well within your organisation, then you can say that the basic functions needed for viability are present. If they are not, then your organisation may not be viable, and you will need to change your organisation to ensure viability.

We need to identify the 5 systems needed to ensure viability of our project, and to draw them on a large VSM diagram which represents the parts of our organisation in its totality.

If any are not present, they will need to be designed and added to your organisational structure.

If any existing parts of your organisation do not fit into one of the 5 Systems, then they are not crucial for viability and may be unnecessary.

SYSTEM 1

'The Purpose of a System is What it Does' These 'purposive' activities are called 'Primary Activities'. It has been found that a division of the Primary Activities into between 5 and 9 subsystems makes the information flows manageable in the system. Each System 1 forms another recursion down the scale and will in turn have its own subsystems and Primary Activities.

SYSTEM 2

This is the function that keeps the whole system running smoothly. The lubrication and facilitation. It damps down any oscillations in a system before they spiral out of control and make that system unstable.

SYSTEM 3

This is the actual systematics of how the operation works. The mechanism that allows the various Primary Activities to work together as a single system, find synergies between themselves and coordinate their efforts. In that way it looks after the internal organisation of the system at the present time, managing the resources available and maximising efficiencies.

SYSTEM 4

This performs the necessary task of monitoring what is happening outside the system-in-focus with a view to identifying potential threats or opportunities that are coming on the horizon. This is essential for the system to be able to navigate its way around in the Environment, whatever circumstances it encounters. (The 'Environment' is not something entirely 'separate', of course, but refers to everything else in the Universal system that is not part of the system-in-focus and is not in a directly recursive relationship with it)

SYSTEM 5

This system establishes the boundary of the system-in-focus mentioned before. Thus it defines the identity of the system itself, where the line is drawn between itself and that which is not itself.

