Peter Fleming, integration to deal with these demands. Required to 'enable' such systems, and thus engineering and a wide range of new theories, methodologies and techniques are within a common information-processing framework. A wide heuristics, linguistics etc., knowledge is frequently required adequately represented quantitively alone; qualitations and systems (biological, ecological and socio-economic) cannot be allow analytical tractability. Many manufactured and natural methods have sufficed, frequently simplifying the problem to highly analytic and numeric based