

The not. these
problems include
pattern recognition



**ASSIGN
BUSTER**

The fundamental concept of neural networks is the structure of the information processing system. Composed of a large number of highly interconnected processing elements or neurons, a NN system uses the human-like technique of learning by example to resolve problems.

The NN is configured for a specific application, such as data classification or pattern recognition, through a learning process called training. Just as in biological systems, learning involves adjustments to the synaptic connections that exist between the neurons. NN can differ on the way their neurons are connected; the specific kinds of computations their neurons do; the way they transmit patterns of activity throughout the network; and the way they learn including their learning rate. NN are being applied to increasingly large number of real world problems.

Their primary advantage is that they can solve Quality, Re-engineering Methodologies, and Business Paradigms problems that are too complex for conventional technologies-problems that do not have an algorithmic solution or for which an algorithmic solution is too complex to be defined. In general, neural networks are well suited to problems that people are good at solving, but for which computers, generally, are not. These problems include pattern recognition and forecasting-which requires the recognition of trends in data.