

PATENT

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Title- Stochastic Process and Soft Computing based business gain analysis

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ABSTRACT

The business gain analysis can be governed by the principle of discrete time ergodic Markov chain ,a probabilistic and auto-regression perspective. Autoregression property can also be applied in order to estimate profit or loss. Recurrent artificial neural networks play a pivotal role in context to business gain analysis.

NUMBER OF PAGES OF DESCRIPTION - 01, CLAIMS -01, ABSTRACT - 01

TITLE : STOCHASTIC PROCESS AND SOFT COMPUTING BASED BUSINESS GAIN ANALYSIS

DESCRIPTION WITH RESPECT TO CLAIM 1

Claim 1 : The business gain analysis can be governed by the principle of discrete time ergodic Markov chain.

Description of Claim 1 –

Prediction in the light of supervised learning rule in context to gain analysis is based upon irregular incidence of bivalent states [0→ loss ; 1→ profit]. Any state is a stochastic process and based on unsupervised learning rule, both states are aperiodic

The transition graph includes feed-forward path, feedback path and self-loop which can be represented as follows-

- (i) Marginal gain with respect to previous data is a feed-forward path .
- (ii) Consecutive state change is a done a feedback path and
- (iii) Consistent profit or loss for a short term time span is a self-loop.

All the aforesaid facts (i – iii) are positive recurrent which signifies the validity of ergodic property .Hence, the business gain analysis can be governed by the principle of discrete time ergodic Markov chain.



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