

# **CAP Twelve Years Later: How the Rules Have Changed**

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The author has tried to present a clear explanation of the CAP theorem.

The author has expressed how "2 of 3" formula is misleading.

The author has discussed that CAP theorem prohibits a very small fraction of the overall design space of the distributed network and

designers should not sacrifice consistency or availability just because partition exists.

The paper mainly discussed multiple factors that should be considered, which are ignored in traditional understanding of the CAP theorem.

The Paper has efficiently discussed the issue of CAP confusion. The paper also discusses how latency is ignored in

CAP theorem. Author clearly states that partition and latency are deeply related.

Another strength of this paper is that author has addressed a way for managing partitions. Author has divided the complete

management of partition into three steps: (i) detection of the partition, (ii) entering explicit partition mode and limiting operation and (iii)

partition recovery. The paper states that the limitation of processed depends on many invariants and during recovery the designer

must decide whether or not to maintain a particular invariant during partition mode or risk violating it.

The paper also states that the designer must solve two problems during the recovery phase. The state on both sides must become consistent, and there must be compensation for the mistakes made during partition mode.

In my view this paper provides a very clear picture of CAP theorem. In today's scenario, the size of distributed systems is increasing

exponentially for example cloud computing and with this requirement of partition will also increase. In that case management of partition will be very crucial.

This method of managing partition is effective and can be deployed on the current distributed systems. Implementation of this idea will result in better distributed systems with improved efficiency and performance.