

above [20]. However, since tags have extra-functionality i.e. support read-write operations, increases the cost of RFID system. On the other hand, the proposed work is suitable for any type of tags because it requires no write operation.

6. Conclusion

In this paper, we presented a redundant reader elimination technique based on directional antenna radiation pattern. Radio propagation model with loss due to multipath fading is used for reader to tag communication. The proposed work needs only one read and no write operation. This work can be used with any arbitrary RFID network. Simulation results demonstrate that the proposed approach can effectively work as a redundant reader elimination tool for reader with practical directional radiation pattern in RFID network. This work can be used in pre-planning of warehouse and logistics applications to assess the optimal number of RFID readers.

7. References

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