Beyond Bitcoin

starting with the article Research Perspectives and Challenges for Bitcoin and Cryptocurrencies. The article illustrates how Bitcoin works and what challenges facing it in different areas. Firstly the paper reviews the two perspectives that state, A- “Bitcoin works in practice, but not in theory.”, and B- Bitcoin's stability is based on an unknown set of socioeconomic elements that are impossibly difficult to describe with adequate precision, making it impossible to provide a persuasive case for the system's soundness. Shortly the paper says that it is insufficient to argue that Bitcoin has worked since 2009 and will continue to do so in the future. The paper argues that we don't currently have enough knowledge to say with certainty that Bitcoin will continue to work successfully in practice. Furthermore, the paper discusses the stability of Bitcoin at different levels. transaction validity rules, the consensus protocol, the peer-to-peer layer, and Stability of mining pools. It also briefly mentioned other topics like Bitcoin security, suggesting modifications to Bitcoin technology, discussing alternative consensus procedures, Bitcoin functionality, and privacy.
On Scaling Decentralized Blockchains: The article addresses the following fundamental questions: Can decentralized blockchains be scaled up to match the performance of a mainstream payment processor? What does it take to get there? Following that, the scalability of Bitcoin was discussed, with reparameterization for latencies and block size suggested. In the long term, scalability will necessitate a complete protocol overhaul. The report outlines a variety of potential viable scaling options, classified a number of newly offered and novel ideas, and highlighted a number of major open technical difficulties for the community.
A survey of decentralizing applications via blockchain: The 5G and beyond perspective. The section attempt to explain the decentralization in blockchain through developing nine fundamental modules of blockchain. The modules are Identity Management, Program Development, Digital Asset Creation, Information Propagation, Block Proposal, Block Verification, Block Confirmation, Blockchain Access, and Blockchain Storage. Thereafter it discusses the blockchain innovations for 5G and beyond.