Despite the advancements in Mobile Wireless Sensor Networks (MWSN) research, several significant challenges remain unresolved, impacting network efficiency. Developing protocols to protect data transmitted by mobile components is essential. Some of the main unresolved issues include: Optimizing MWSNs In MWSNs, there are still challenges like improving data routing, boosting throughput, cutting transmission delays, balancing energy use among nodes, and managing sensor loads. Handling mobility involves using different movement patterns at varying speeds and adopting diverse contact detection methods, such as on-demand, regular checks, and scheduled approaches. Reliability The mobility of sink nodes in MWSNs can lead to delays, packet losses, and changes in network topology, affecting overall reliability. Battery-powered nodes have a short lifespan, so routing protocols should prioritize extending network life and minimizing energy consumption. Ensuring stable and reliable operation of MWSNs is essential for efficient data transmission. Energy consumption Energy consumption is a critical concern in MWSNs due to the limited energy resources of sensor nodes. While some security protocols exist for traditional WSNs, few have been adapted for MWSNs, leaving ample room for future research and development. Speed of mobile nodes The speed of mobile nodes is an important issue that requires further attention because delays are directly influenced by their speed. Security Security in MWSNs is a significant challenge due to the presence of mobile elements. Adjusting the speed of mobile elements based on the situation through data gathering in the network is possible. Addressing these challenges is crucial for further progress in the field. To address this, it's important to strike a balance between the energy used by the network and the computational demands of algorithms.