Periodic structures inherently support lattice modes that transverse on the interface of the metamaterial. In this investigation, the lattice mode played a pivotal role in meditative coupling between the constituent resonators in a unit cell and is observed in an avoided crossing of eigenmodes. This avoided crossing can be theoretically modelled as two or more coupled oscillators. Further investigations also show that on resonant coupling of the lattice mode with the structural eigenmodes provides Q factor enhancements. Particularly on high Q resonance such as the Fano resonance, this enhancement of Q factor proves that radiative losses can be further minimized through optimization of the lattice modes. At low loss and extremely small structural asymmetry, the Fano resonance possesses ultrahigh Q factor also known as the quasi-bound states in the continuum (QBIC). A new concept and model were developed to show that a subwavelength thin dielectric can be used to support and modulate QBIC resonance in a symmetric and metallic split ring resonator which could be used as an active ultrafast filter or a micro-fluidic sensor.