Human or social dimensions need to be significantly considered to maintain organizational sustainability. Unfortunately, this aspect has received relatively little attention when compared to other dimensions of sustainability. This study promotes the presence of a leader to manage conflicts, which cause hindrances in achieving sustainability. This is possible by maximizing sustainable knowledge sharing in a team, by effectively utilizing temporal diversity, including time urgency, time perspective, and pacing style diversity under a certain time pressure. This study has examined the effect of temporal diversity on knowledge sharing within teams by taking temporal conflict as a mediator. Moreover, it was also investigated whether the role of team temporal leadership is effective in utilizing the conflicts arising from the temporal diversity. The research design was quantitative in nature. A purposive sampling technique was used to gather data from 100 dyads working in the telecom sector of Pakistan, by distributing questionnaires. The findings suggest that team temporal leadership plays an effective role when a conflict arises rather than after it has arisen because more time and resources will be required to resolve such conflicts arising from temporal diversity. When the temporal diversity is low, the leader can manage the conflicts quite well, but as the diversity increases, the role of the temporal leader become much harder which may cause increased conflicts because of the limited capacity of a leader to manage those conflicts. Furthermore, it was observed that conflicts, if managed properly, may lead to increased knowledge sharing.